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Ocean steams in for the big number one - page 3

NEW COMPUTER EXPRESS

First news, first reviews - every week



Psion organises its

first laptop

- page 5

PC SHOPPING SPECIAL



We check out
the essential PC
packages

- page 24



AMIGA SHOCK

Commodore surprises with new offers! - page 2

**Amiga
Atari ST
BBC
C64
CPC
MSX
PC
PCW
QL
Spectrum**

see pages 36-43



**WE ARE THE
CHAMPIONS?**

*The peculiar tale of
Kenny Dalglish and
the Liverpool licences*

- page 2

Best sellers, best tips

Help on five of the
biggest Christmas
treats: Operation Wolf,
Afterburner, Thunderblade,
R-Type and Batman



- page 23

Sizzling coin-op batch up for grabs



• Shinkai: Not property

A job list of "top notch" coin-op licenses are currently up for grabs for the software house willing to spend an estimated £500,000.

French software publisher FIL last month went into receivership with the rights to eight Japanese coin ops in its possession. Its UK agent The Sales Curve is currently negotiating with various software houses one of which is believed to be Virgin/Mastertech.

Heading the arcade games is beat-em-up Shinkai as well as driving game Continental Circus and Ninja Warrior. One obvious software publisher described the floating games as "bloody good stuff".

The games were to appear under the Rebel label. Indeed, it is thought that if a company such as Virgin/Mastertech were to buy the games it would be adding a whole new label to its stable.

Virgin/Mastertech though is denying any interest in the titles. "We're not chasing them," said a spokesman. "We're very selective about the coin-ops we publish, such as Double Dragon."

Whatever the outcome of the negotiations, gamers can look forward to the first titles arriving within the next few months. Despite FIL's difficulties, programming and development has gone on unabated. "We'll still have three games out in the first quarter of this year," explained The Sales Curve's boss Jane Cavanagh. "And then there'll be another two to follow in the spring."

The day Nintendo came to town...

This week's Consumer Electronics Show in Las Vegas only went to prove what we already knew - that Nintendo do still wield absolute power in the big money US leisure market.

The firm's economic stand dominated the packed hall with grateful consumers struggling up to the Japanese giant.

They accused their own few yards of the Nintendo village and jealously paraded their newest games.

In contrast, Sega's stand

seemed subdued, as if that firm had realised that any attempts to emulate Nintendo would necessarily fall short. "There's a real buzz with Nintendo, it's absolutely huge," offered one astounded observer. "Sega's stand is dwarfed and really fairly quiet."

In the bare and chaotic hall was mainly of Nintendo's forthcoming clash with Atari Games. Should the latter win, everybody agreed, the lucrative console scene will be changed forever.

All this rather overblown CES debut of Hyper, Microphone, Madagasc, Time and UK hopefuls.

But all can take heart that the stand fees and light costs and hotel bills have been well spent. Businessmen from every corner of the US and from every country on earth descended on Las Vegas for the event, which is surely bigger than the PC show. The town has 775 hotels. Last weekend there wasn't a vacant room.

Liverpool foul up baffles publishers

An extraordinary sequence of events and misunderstandings has meant that gamers can expect not one, but two Liverpool computer games this year - as well as a further two featuring Liverpool players.

Grandslam announced that it had secured the official Liverpool license late last year and that a game would be appearing "some time in '89". However, a small company called Video Images last week claimed that it had secured the Liverpool license and that a budget game would be appearing by Easter.

It would appear though that Liverpool has managed to secure license fees for two games. Grand Slam has the rights on the team whilst Video Images has the whole football club.

To confuse matters further Liverpool manager Kenny Dalglish - who personally endorsed Grand Slam's game recently - is already featured on a game by Newcastle based Zappeln. And Kop hero Peter Beardsley is also featured in a game - by Grandslam.

"When I saw that Grandslam had the license I was really worried because we already had approval," said Video Images' Dave Colley. "But we've got the club but not the team." In effect this means that Video Images can't use the players to promote the game in the same way that Grandslam can.

Speaking from Las Vegas, Grandslam's boss Stephen Hall told Express: "There's obviously been some confusion but I have to stress that there's no animosity at all. I



• Dalglish: Three game confusion

hope that we can settle this in a mature fashion. I'm certainly not going crazy and spitting blood."

Two new Amiga games packs due this month

THANKS A BUNDLE

COMMODORE!

Commodore will be selling the Amiga 500 bundled with five games from the end of this month.

In effect, it will mean that Commodore has at last responded to the extraordinary success Atari has had with bundling games for its own 16-bit machine, the ST.

Two separate offers are involved. The first includes nine free games as well as the standard modules at the normal Amiga price of £399. The titles are Bubble Ghost (Infogrames), Nebber (Mongoose), Quadball and Starcross (both Logotron), Asak and

Better Dead than Alien (both Entertainment International), Interstellar Soccer (Microdeal), Winter Olympiad (Tyndale) and Sporting Image (Domark).

The second is more likely to appeal to experienced computer users. Coming £550 it features an Amiga 500 upgraded to one 1Mb with a copy of the six disk epic game Dragon's Lair.

The upgrade would normally cost £150 so effectively buyers are getting Dragon's Lair for free. That can only be played on an upgraded Amiga and would normally cost £50 anyway. Commodore will be the only company officially allowed to sell the game in this country for the next three months.

Those who opt for the second bundle will also be able to play the increasing number of 1Mb games which are being imported from the US, including the likes of Dragon's Master.

Although this represents Commodore's first foray into games bundles with the Amiga it is not the only one on offer. Dealers are already selling a ten game pack put together by



• Amiga: Two bundles due

A2000 next for bundle treatment?

Behind all the excitement of the Amiga games offer lies the strong possibility of a business bundle in the very near future.

Commodore watchers though are all but ruling out any such deal on the A2000, favouring a special A2000 assault which will include an impressive bundle of business software coupled with a price rise. Top brass at Commodore are known to believe the machine to be underpriced at its pre-

sent tag of £1,495.

One insider told Express: "Corporate buyers are reluctant to believe that the A2000 is a worthwhile machine and better than those which which are two or three times the price. Once the doors have been opened though they say that it's phenomenal. There is a school of thought which says that the price should go up with extra software added."

distributor SDL (Express 8).

Commodore is preferring not to comment on the matter although an announcement is expected within the week.

OPERATION WOLF TAKES TOP SLOT



• Operation Wolf: 1988's winner

Ocean's Operation Wolf has landed the gaming industry's biggest prize: the Christmas number one. The company did but dethroned 1988's most important chart by also taking the second spot with Robocop as well as having six other titles placed in the Top Twenty. Robocop might well have surprised everybody

and taken the prize itself, had it been released on the ST and Amiga. According to Gallup it has been out-sold by Op Wolf on all the 8-bit formats.

This is the first time in three years that US Gold hasn't been in the top slot. In 1986 it won with Gauntlet and again last year with Out Run. This time, the company had to make do with fifth place with Thunderblade.

The race to win the top spot and it makes all the overtime worthwhile, said Ocean's Tracey Crook. "But we didn't get any personal satisfaction out of kicking US Gold off the top."

The other hot tip - Activision's Alienarena - came in fourth place with Melbourne House's Double Dragon proving to be the dark horse of the race with a creditable third

ranking in the Gallup listings.

As always compilations featured well with five in the Top Twenty - Dante (US Gold), In Crowd (Ocean), Twin Coin-opa (Ocean), Game Set and Match 2 (Ocean) and Superio Challenge (Bless Jolly).

Activision bags Roger Rabbit



• Roger Rabbit: All formats deal

Shocking graphic extravaganzas Who Framed Roger Rabbit has been scooped up by Activision and should be appearing on most major formats.

The game - developed by Walt Disney's software arm Buena Vista and based on the blockbuster movie - has already appeared here on the Amiga via supplier Galantur. Activision stresses that it has the "official rights".

It should be launching the Amiga version later this month at £24.95 with other versions set to follow later in the year.

ST gallery

Atari ST specialist Electric Distribution is to launch a pair of clip-art packages - pictures which can be pasted onto documents. Scarlet costs £40 and features 100 "professionally drawn and useful" pictures. Dradefit is £10 more expensive and sports 150 pictures. This, says the firm, has more unusual illustrations.

GAMES TOP TWENTY	FULL PRICE
1 Operation Wolf Spec: C64, CPC, ST, Amiga	£23.99
2 Robocop Spectrum C64, CPC	£23.99
3 Double Dragon Spectrum C64, ST, Amiga	£23.99/£24.95
4 Alienarena Spectrum C64, CPC, ST	£23.99/£24.95
5 Thunder Blade Spectrum C64, CPC, ST, Amiga	£23.99/£24.95
6 Dante Spec: C64, CPC	£23.99/£24.95
7 Falcon Spec: C64, ST, Amiga	£23.99/£24.95
8 R-Type Spectrum C64, CPC, ST	£23.99/£24.95
9 Football Manager 2 Spectrum C64, CPC, ST, Amiga, PC	£23.99/£24.95
10 In Crowd Spectrum C64, CPC	£23.99
11 Gauntlet Spectrum C64, CPC, ST, Amiga	£23.99
12 Tailor Coin-ops Spectrum C64, CPC	£23.99
13 Game Set and Match 2 Spectrum C64, CPC	£23.99
14 Last Ninja 2 Spec: C64, CPC, ST, Amiga	£23.99
15 Homes of the Lambs Spectrum C64, CPC, ST, Amiga	£23.99
16 Pacmania Spec: C64, CPC, ST, Amiga, MSX	£23.99
17 Return Of The Jedi Spectrum C64, CPC, ST, Amiga	£23.99
18 Rambo 3 Spec: C64, CPC, ST	£23.99
19 Supreme Challenge Spectrum C64, CPC	£23.99
20 Colin Thompson's Olyn. Chail. Spec: C64, CPC, ST, Amiga	£23.99

GAMES TOP TEN	BUDGET
1 Jet Blade 2 Spec: C64, CPC, ST, BBC, C64, Electron	£14.95
2 Ghostbusters Spectrum C64, CPC, Amiga, MSX	£14.95/£15.95
3 Bomb Jack Spectrum C64, CPC, ST, Amiga, C64	£14.95
4 Through the Trap Door Spectrum C64, CPC	£14.95/£15.95
5 Back to School Spec: C64, CPC	£14.95/£15.95
6 Commando Spectrum C64, CPC, BBC, C64, Electron	£14.95
7 Footballer Of The Year Spec: C64, CPC, BBC, Amiga, MSX, C64, MSX	£14.95
8 Skidheads Spectrum C64	£14.95/£15.95
9 End Zone Spectrum C64, CPC	£14.95/£15.95
10 Yabba Dabba Doo Spectrum C64, CPC	£14.95

COMPILED BY GALLUP

MS: Microsoft
BBC: BBC
C64: Commodore
CPC: Commodore
ST: Atari
Amiga: Amiga

Nintendo hits back

Japanese console giant Nintendo has turned its legal artillery on Atari Games following the latter's \$300 million lawsuit of three weeks ago (Express 8).

Nintendo's games console has established itself as the leading toy in the US but Nintendo has always kept a tight grip on software written for the machine. Licensees have to pay to produce games.

Mari Games rebelled against this at the end of last year and launched a legal attack on the Japanese, along with accusations of Nintendo monopolising the market

unfairly. Its subsidiary Tengen has produced its own version of the games. Nintendo is not pleased.

Nintendo is accusing Tengen of breach of contract, unfair competition and activities which violate the Racketeer Influence and Corrupt Organizations Act. It has also officially terminated the original licensing deal.

The firm says that Tengen has received vital information and help whilst working with Nintendo. Nintendo's engineers are currently examining Tengen's games to see if they violate any

patents or copyrights. The firm is also promising to put up a fight against Atari Games' original lawsuit.

"Having obtained the benefits of the licensing arrangements Tengen has announced that it will begin to independently manufacture and distribute games for the Nintendo which it previously sold under license with Nintendo," said the firm's US senior vice president Howard Lincoln.

Atari Games' original suit, he said was an "obvious ploy to divert attention from Tengen's plan to violate the license agreement."

Chip drought: end in sight

Not for the first time industry pundits have bemoaned the end of the damaging D-Ram chip drought which has beset the world's hardware manufacturers for more than a year.

Leading analysts Datapoint and Burndy de Zotte West (BZW) were last week forecasting cheaper chips and more of them for 1989. The possibility of PC prices coming down as a result has been cited, although this seems unlikely.



• D-Ram: Faster than predicted

The chip drought was blamed mainly on Japanese microchip manufacturers concentrating on the more profitable 1 Megabyte chips at the expense of the popular 256 Kibyte versions. This occurred in the wake of US-Japanese trade tensions. This has caused companies such as Amstrad and Atari to raise prices or announce shipment delays in the past.

A readjustment to the new technology and reorganisation on the part of the Japanese has given rise to the latest optimism. American companies are desperately trying to regain a footing in the chip market but are still lagging behind.

The drought is nothing new to the market. For the past 35 years companies have jostled from severe shortages and high prices to great numbers of cheap chips. Optimists

haven't ruled out a continuation of this trend but signs of a smoothing out are being cited.

Datapoint's chip expert Jim Beveridge said in his 1989 forecast that there would be "some correction to the old syndrome" because chip makers and computer companies are becoming more organised with their inventories.

"The Japanese moving up the technical spectrum has caused a shortage," says a BZW spokesman to Express. "But there is now a better yield on popular chips. The problem is that the market is technology driven and you have to move on to new projects very quickly." Stability would be the result of a settling of the 1 Megabyte craze, he said.

He predicted that whilst it was possible that an easing of the chip crunch might mean PC prices slipping these were other factors which might prompt such a trend.

War breaks out over war game

Highly regarded strategy war game UMS (Universal Military Simulator) has become the focal point for yet another inter-company battle.

The game is sourced from Iowa-based Interplastic Development but is published by Rainbird. However, the follow up, UMS II, is to be sold around the world by Birmingham-based US Gold.

Interplastic says that Rainbird has rejected the original UMS poorly. Rainbird has reacted that the American firm is sore because it rejected the sequel.

"We decided that we just couldn't afford to do business with Rainbird any more - it was costing us so much in lawyers and accountants to get them to pay bills," said Interplastic president Ezra Sidran. "They did a good job but at what cost? They do very bad business."

Rainbird swiftly responded to the harsh criticism. "I'm surprised he's said this about us because he's always been such a nice guy," said the firm's Julia Coombes. "Perhaps he's just upset that we rejected the game. It's not up to the standard of something we'd want to publish."

Either way, US Gold will be launching the game in the summer on ST, Amiga, PC, C64 and Mac. Prices have not been confirmed.

UMS
THE UNIVERSAL
MILITARY SIMULATOR

RAINBIRD

• UMS: Battleground

Midget with more muscle

Fledgling PC manufacturer ACPM has upgraded its Micro Midget machine to include a 20MB hard disk drive.

The new Micro Midget XX will cost £1,099 as opposed to the original XT which will retail at £595. ACPM is also offering a 64MB disk drive upgrade kit for the 1,300 or so existing users. A 40MB version is also planned for later this winter.

The Micro Midget is so called because of its small desktop footprint: 50" by 50". This, claims the firm, is a factor more and more companies are taking into account.



• Polar Expedition: Real life computer-controlled pictures

Computer users head for the icy wastes

The first interactive videodisc released by Virgin offers students the chance to take part in a uniquely-realistic simulation of an expedition to the North Pole.

North Polar Expedition runs on the BBC Domesday laser disk system which is installed in more than 2,000 UK schools and consists of a laser disk drive hooked up to a BBC micro and monitor (MS-DOS and FMML versions are to follow). The package allows five users operating as a team to follow in the footsteps of Arctic explorer Sir Ranulph Fiennes.

The students are offered puzzles and questions as they travel

across the polar ice. And from time to time they come up against perils generated at random such as polar bears and crevices. According to the progress they make the monitor displays 'extraordinary' film and slide footage of the original expedition.

Despite its sophistication, at £199 North Polar Expedition should be affordable for most schools. "It will help teach people Geography, which education has had some trouble with," said Virgin's William Beckett. "It also offers people the ability to use inter-personal skills."

PSION PLANS LONGER LASTING LAPTOP

World famous handheld computer company Psion is working on plans for a laptop machine designed to operate for longer on a set of batteries than any rival.

The firm is saying nothing about the project but it emerged last week that the machine is planned for launch in the autumn - around the time of the PC Show. And given the company's track record the price is

likely to be within reach of the mass market.

Although the machine has been under development for a year now it still has not been given a name. Psion engineers and technicians are still only calling it 'the laptop'.

But an informed source told Express the laptop will probably utilise data storage technology similar to the Psion Organiser handheld: that of insertable EPROM cartridges as opposed to floppy disks.

There is already a base of such software running in price from £12 to £100 depending on storage capacity and applications.

The ability for the laptop to be able to communicate with PCs is also being given a high priority.

Just before Christmas Psion bought up Milton Keynes-based modern company Durcon for 'an initial consideration' of £4.5 million. "I think it's far to assume that Psion is very interested in the communications market," said the source.



• Organizer: Laptop sister by autumn

He added: "Psion's engineering strengths are in the ability to offer little power consumption with a large amount of storage."

He said the laptop will use six batteries and that whereas most laptops exhausted a set of batteries within about four hours, the new machine would offer up to a week of continuous use.

Q. Who's famous for shouting Eureka?

Archimedes was an often loudly regarded as the holder of the computer users world - so Mandy Micro has come up with a program to test their mettle.

Archimedes contains more than 1,500 questions and costs £14.95. "It's simple enough to use but the questions can be difficult," said Mandy director Dennis Scott. More info on 0547 377.

Computing: It's a man's man's world

Girls are losing out when it comes to learning on computers, according to a book published this week.

Celia Heylie, a maths professor at London University, says boys dominate computers in schools with girls being left behind. In the

book she says boys are more likely to opt for computers as a subject in itself (being more likely to have computers at home).

"It is difficult to avoid the disturbing conclusion that girls are learning less than boys about computers," she

says. Recommendations include using computers for all subjects rather than just for computing.

Also in the book Lynda Carr comments: "Computers are still perceived for men. Even at Christmas we saw adverts for computer

games with a boy at the keyboard, talking to his dad. As long as this male orientated approach exists girls will be put off."

Girls and Computers costs £5.95 from the Institute of Education, 20, Bedford Way, London, WC1H 0AT.

NEW COMPUTER EXPRESS

OUR OPINION

Ocean Software has pulled off a remarkable coup in snatching the top two spots in the lucrative Christmas games software chart.

And although many in the leisure computing industry are green with envy, the majority would admit the Manchester crowd - recently voted software house of the year - fully deserve its Gallup victory.

US Gold's massive victory the previous year with dubious versions of Out Run was widely seen as a triumph of marketing clout over program quality.

So it's something of a relief that this time the top spots went to titles worthy of the honour. Operation Wolf the number 1 is a fine arcade conversion, and runner up Robocop is not far short of brilliant.

Evidently Ocean meant what it said a year ago when it proclaimed a new commitment to program quality.

Well done, boys. You delivered.

Football mad D&H changes tactics

Scorecray games firm D&H is planning to field yet another line-up of football titles - but it admits that it may soon have to change its game plan.

With the range of possible entries football games face running out, the firm is planning to bring on a new line-up of strategy games from other sports such as horse racing, motor racing, cricket, snooker and boxing.

D&H has built itself on the Football Director series plus titles like International Manager and Two Player Super League. New titles in the tunnel include a budget title of Soccer G, Cup Football and Euro Super Cup.

"I suppose I'll run out of football ideas in the end," said joint boss Tony Haggard. "But for the moment we're planning another Football Director with graphic players which respond to their own special skills."

New games such as The National, Grand Prix Manager, Snooker Manager, Racing Manager II and Cricket Captain should be arriving over the next few months on all formats.

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PC monitors going cheap(er)

Growing competition in the market for high-resolution PC graphics has led to aggressive price cutting from one of the big players.

Citizen Europe has lowered the price of its CCM-104 high end colour monitor from £795 to £645 making it "approximately half the price of the comparable IBM monitor". The unit is capable of an enhanced VGA resolution of 1624 x 768.

It is expected to appeal particularly to PS/2 system users, although to make full use of the monitor's resolution they will require IBM's optional 8514-A board.

Owners of other PCs can obtain the same resolution by buying Citizen's POG 1000 graphics display board. The price on this has been cut to £380.



MICROPROSE CHASES UK SOFTWARE RICHES

Ambitious US software house, MicroProse has swooped into Europe to sign up "the very best" arcade games for the ever hungry American market.

The simulation specialist intends taking shoot-em-ups and strategy games back across the Atlantic. A deal has been signed with Chesham-based Hewson - and talks are also under way with French publisher Loriciel and another unnamed UK software house.

Publishers who strike a deal with MicroProse will have their products sold under a new label in the US called Medalist. Hewson's first three games to go Stateside will be Eliminator, Mechwarrior and Sargon.

"We're real excited about this," enthused MicroProse president Bill Stealey to Express. "We've done a big survey here (in America) and the hard core simulation people only account for about 25 per cent of gamers. We want to get to the hard core arcade people as well."

I've already said that we intend being a \$100 million company."

Hewson's boss Andrew Hewson told Express: "If the world suddenly didn't want to play simulations then MicroProse would have a problem. I was looking for an American partner and they are ideal."

SHOWTIME FREEBIES

High profile business software publisher Ashton-Tate is going to be doling out £12,000 worth of free software at the Which Computer? show next month.

A prize draw will be held at the end of each day of the exhibition held at the NEC in Birmingham. Winners will be going home with the likes of dBase IV, Paradox Professional and Framework. All Which? will be held from 21st to 24th February.

MICRO-BOOM

Between 1983 and 1987 the proportion of manufacturing companies using computers rose from 42 to 72 per cent according to a government report on Britain published last week.



• Shady Euro swoop

Battle of the Amiga Basics

Amiga owners looking to improve on the Basic supplied with their machine are split for choice with the launch of two new packages.

Comwell-based Microdeal has brought out the BAS-05 GFA Basic which was formerly on the ST, and HiSoft has dealt out its own Amiga Basic priced at £79.95.

Not surprisingly both firms

claim their package is the better. Microdeal is citing its success with the ST version with claimed sales of 70,000. HiSoft is pointing out that its package is a compiler rather than an interpreter and is compatible with Amigafile. Indeed the first 1,000 copies are being bundled with a free programming guide to Amigafile.

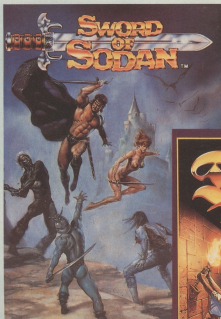
"Despite problems in the past, Basic is still the best language to learn on and you can use that experience with other languages," said HiSoft's Andy Penfold.

"Now that the Amiga machine has grown as much I don't see any reason why GFA shouldn't do as well as it did on the ST," says the Microdeal line.



• HiSoft Basic: Sparring with GFA

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16 BIT CENTRE

BLAAAAAARGH!!!!

I cannot stand it. It's so good, I must put pen to paper or else I shall take it out on the dog. Your article in issue 71 is consuming the International Coalition Against Violent Entertainment just me, angrier than just about anything I have read in the computer press in five years.

I am a 36-year-old ST owner with

a string of computers behind me, starting with a Spectrum some five years ago. I use my computer for a lot of tasks, but mostly I play games, a pastime I still find stimulating and relaxing, paradoxically. During my computing career, I have zapped aliens, shot at space ships, slashed dragons, blown up buildings, thumped things, and generally created all sorts of havoc on the small hypnotic screen.

Do I then go out and attack old old ladies or kick the dog? I do not - nor do I have any desire to do so. I am a gentle soul, old enough to have had a brush with peace and love in the late sixties and I am, if anything, a pacifist in my approach to the world around me.

So why do I sometimes play violent games? For fun, ladies, and the sublimation of reaching a goal. I think not as a substitute for the real thing. People like the coalition

have a nasty habit of simplifying issues to the point where they become black and white, right or wrong. Then they go out and tell people what they should think or do. This, to me, is a kind of psychic violence and should be deemed as such. Their pseudo-research is exclusive, non-verbal and extremely petty.

There is enough real violence in the world. This should occupy people's attention if the coalition want to concentrate on something useful in the world. It is South Africa, the Middle East or any number of violent and dangerous places in the world.

Let them leave the test of us seeking harmless fun and pleasure alone. Mark Jenkins, King's Cuck, Herts. (No Great mad) - I leaves the others' standing.

✓ **Couldn't agree more.** When next-a-quote Tyr Mips and Whitehouse start making a fuss, things have a habit of easily slipping from absurd innuendos to legislated reality. These are strange days.

Reverend, for the most recent letter to Express to date, you win a prize. We'll send you the most violent ST game we can find - that's if we don't forget over which one we should choose, that is.

Dear Reader

We've extended this section to THREE packed pages this week in an attempt to do justice to our ever growing post bag. If YOU write to us we might even drop in a fourth! Send to:

Express Mail, 4 Queen Street, Bath, Avon BA1 1EJ

PS. Sorry, NO personal replies, even if you include an SAE. Just make your query interesting and we'll publish the answer here.

graveyard scenes, and then a situation where you have to drive the family house in order to rescue Marilyn from the evil grasp of "Old Nick".

So perhaps we could ask you to review this game, bearing in mind these further options and should your reviewer, Andy Smith, need any assistance in getting to these far-flung levels then please tell him not to hesitate to contact us.

The game, incidentally, was programmed by Topque, who have recently had many hits, including Pacmania etc. Roger D'Hulley, Managing Director, Tiger Developments

✓ **Given that the review was favourable** "Again Agan has done a nice job of capturing the feel of the cult series... I hit just the right level between frustration and addiction", you haven't really got that much to complain about. Doubtless Andy Smith is not hesitating to contact you at this very minute.

DIY W/ WANTED

Welcome to, to your new magazine. My lines are practical articles, hardware reports, business-type software and Public Domain programs.

My dislikes are anything to do with computer games! I would like to see an article on monitors, in regard to fitting higher resolution monitors to home computers. And a series of articles, dealing with programming models would be great. For example, Word Processing would require Sore and Word (from prog.), Word Warp, Char-weld, Mangos, etc. - all could be dealt with in module form, and the final result might well be a DIY W/ W program, plus a full list of useful modules to use as required.

✓ **A module a week would help the clients buying!** Keep up the good work! GJK Heppel, Horncastle, Lincs

✓ **One of the mysteries of the modern world is just what will appear in Express next.** Sometimes, we even astound ourselves. (A lawyer added: This is not in anyway meant to intimate that Mr Heppel's wishes will be fulfilled at any stage.)

CONSOLING THOUGHTS

I am writing to congratulate you on your mag, especially the articles on the Nintendo and Sega machines, and you give more information than other mags about the new 8-bit machines.

Please, for us console users, we can have a page of our own? Mark Ford, Nechells, Birmingham

✓ **With very few software releases, the**

console market does not easily lend itself to a regular spot. We prefer to cover it for the time being by one-off specials (new Sega machine issue 4) or in the news pages.

MEGA PROBLEMS

For many months I have been eagerly anticipating the issue of the Amiga version of Dungeon Master. Then, in late December, advertisements for this game began to state: "1 Meg". A phone call to a mail order company confirms this. Oh horror! My machine has only 512K of RAM!

Then perhaps a glimmer of hope as I noticed in the combined issue 7/8 of your excellent magazine that you are sending a copy of Dungeon Master to one of your correspondents - a Mr Edd who presumably owns a standard AS50.

What is going on? Or am I doomed never to enjoy the delights of one of this past year's best games on my machine? BJ Hughes, Worcester

✓ **Dungeon Master does indeed run only on one meg Amiga.** Unfortunately, unless Wiersoft can work wonders, it looks as though the vast majority of Amiga owners will indeed be denied the pleasure of the game. It's almost enough to make you wish you'd bought an ST...

TRAINSPOTTERS' CORNER

Probably by the time you get this the whole world and his dog will have pointed the fact out, but I will do it anyway. Do you realise that the recently produced picture of an Amibird Specity (issue 5) was printed back to front? No! Oh well, better luck next time, I suppose. Keep up the good work. I enjoy reading all the mag, even the bits about computers I don't own! I have an early MK1 Specity which has never ever broken down, and an ST0 Robert Morgan, Rhondda, Mid-Glamorgan

✓ **Isn't it great getting your games stuff!**

THE REAL PIRATES

Over the years I have read more bawdy about software pirates than just about any other subject I can think of.

In my opinion, the biggest pirates are the software houses themselves, who continuously turn out over-priced garbage game programs with only a thought in their greedy little minds, and that is to cos money out of children.

I wonder how many of these people have ever seen the disappointment on a boy's face: "lads, when I save your pocket money and buying the latest disk-packaged

AMIGA PONDERR

I own a Commodore 64 and have some money in the bank. Before buying this great mag, I was planning to buy a disk drive but I see that the Amiga was a good job. So you think I should buy the disk drive or save a bit more for the Amiga?

Matthew Davies, Glyneath, West Glamorgan

✓ **It depends on your precise needs, but you're probably better off saving for an Amiga.** Disk drives for the 64 are noticeably slow and there are some good deals going now on the Amiga (see news pages).

BRING OUT SKELETONS

I purchased a Commodore PC1 from Lan Computer Systems Ltd, Ransford, and the unit failed on the day of delivery, and although I tried to get a replacement by phoning and writing to the Lan Trading Office and myself to get an agreement from Lan to refund my money, but they refused to pay me any out of pocket expenses.

In the final outcome I had to sue them in the County Court and a County Court judgement was granted against Lan Computer Systems Ltd on 12th December 1988. This should be available to view in the Public Records Office from mid-January. I now have my money back and all my expenses and compensation - thanks, Lan.

✓ **I will not recommend Lan or the Commodore PC1 to anybody.**

This brings an idea to mind. Just how many dealers, suppliers and software houses have judgements against them? We could then avoid using these people. It would make a nice article, which is the motto of public records - getting the skeletons out of the cupboard.

Ken Handacre, Brixington, East Fords

✓ **It sounds like a useful idea, but ultimately it's not that fair.** Just because a company has a county court judgement against it in one case doesn't mean that all its dealings are suspect. After all, it could well be that many Express readers have found Lan to be fine in the past.

SIZE ISN'T EVERYTHING

I have to agree with Bryan Morton (issue 5) that Express should cover the more serious

side of computing on the Spectrum and was pleased to hear that attention is to be given to this.

I am also in agreement with Express when you say long program listings can only putify the space they take up if they are extra special. Long listings are not really valuable any more because of the tedious of typing them in coupled with having no real worth until the hard work is done. These longer home-produced programs are so much more suited to a disk based magazine as they can be more easily loaded. (Dorson Software of 605 Loughborough Rd, Leicester, produce such a compilation every month on Opus, Disciple, Plus II, Microdrive as well as on tape.)

Short listings, however, are worth their weight in gold if they present some new idea or useful application so I hope you might include the occasional "short".

Agree, like Bryan, I like the idea of the most popular computers having their own columns. May I suggest one extra column headed: "OTHERS" to vary each week as you get different material? Brian Davies, Manor Park, London E12

✓ **All that would happen is that we'd get the new Commodore hoping that he was worth more than just two sentences a month. Then of course, there'd be the Atari 8-biters... You just see if we're not right.**

PLEEEEEASE!

Microcomputer start including an Alan 8-bit column. No disrespect to BEH and all, but there are probably more Alan 400, 800, 6000L, 800L, 2600, VCS, 658E and 1300L owners who like such a column. The local Dealers sold out of GEMs. RT Thomas, White City, Gloucester

✓ **We WERE right.**

PLAY IT AGAIN AGAIN

We are writing regarding the review of The Monsters on our label Agan Agan in Express issue 7-8.

It would appear from the review that reviewer has not progressed into the depths of the game and has only reviewed the first section in which you play the character Lily. There is much more to the game than this, if you play the other characters of "The Monster" family. There are tunnelling scenes,

offering from 'lip-off' software they have bought a load of boring rubbish.

If people can get pleasure out of cracking this junk I say best of luck to them, because they will get very little pleasure out of playing 95 per cent of them.

Also in my experience, the majority of copied games are in the hands of children who would not have bought the original anyway because they can't afford to. I recently visited a friend who had just purchased an Atari. When I arrived at his house he was playing a game called *Starfighter*. I watched him for a while and it all looked very familiar, and I realised that I used to have the same game for a Z80! I think it was called *Defender*. Is this producing innovative software? Incidentally, when I talk about pirates I am not referring to commercial pirates.

J. Huey, Cardiff, West Wales

✓ **Sure there's a load of junk around, but that's where the magazines come in. Too many synopses reviews have done almost harm to games players everywhere—even if they have helped boost advertising revenues in the short term. Rely on knowledgeable, critical reviewers and avoid the dross.**

MEMOTECHNICALITIES

I must put the ranks of those writing to you and start by praising your efforts. A great mag, and the first I have bought regularly since. I am a long suffering Memotech owner, but we won't go into that just yet.

My reason for writing is twofold; firstly, please find attached photocopies of an advert from several years ago, for a speech recognition unit. A couple of months ago I wrote to another computer magazine to enquire if the company and/or product still existed. I also

ANOTHER PHONE MESS...

After reading about your planned piece on cracker (Orion issue) I thought I'd write and give my opinion on modem myths.

Picture it! It's the scorching 11 summer of '88 and I'd just obtained a spanking new Pace Linkset modem. I was thrilled and was "online" immediately. I was working out my costs using a little booklet from BT. I gave my parents a carefully calculated amount according to how long I'd used the modem and where I was phoning.

Our usual telephone bill is around £60. I had to pay for anything over and above that.

included an SAT but have had no reply! I am repeating the exercise with a far more reputable mag.

My second point is that there seems to be a glitch in one of your adverts. It has in fact occurred in several editions, but refers to the Christmas issue on page 15. It is a Silica/Amiga offer, in the software section, the Terosoids screen and the Thunderside screen seem to be identical — is that right? I look forward to hearing from you soon, Neil Dixon, Basingstoke, Hants

✓ **As far as we can tell, the company you refer to (William Stuart Systems) is no longer in existence. Possibly that's because there isn't a terrific demand for speech recognition units for Memotechs these days. If anyone is in possession of such a product as a "Big Farn" (see kid you met and wishes to sell it, then perhaps they could contact us.**

I must admit it was great fun, in fact I think I became mildly addicted. The day wasn't complete without a bit of downloading.

Near the end of just one quarter I had given my parents around £30 more than enough, I thought. Just to be prudent, my mother phoned BT for an estimate on the phone bill. Suck came the extraordinary figure of £27.07

As you would expect, the modem was immediately confiscated, and after many heated words, my pocket money was taken away (surprise, surprise).

But this was not the end of my sorry



tale. In about a week's time, the bill arrived and it had miraculously increased to £3000!

Remember, I wasn't online at this time. The moral of this story is at always be generous when calculating costs, so don't have children!

David J. Boyle, Crief, Perthshire

✓ **We're such crackers for tales of woe that we've decided to award you a Mystery Prize. To help you work out your costs more accurately - should you ever be allowed within sight of your modern again - a wax calculator is being dispatched forthwith.**

Kathal Quinlan, Hayes, Middlesex

X **That's a bit harsh on ACE, matey. Truly is the great scheme of things it is a wondrous publication, regardless of whether or not its freedom ran on your machine. That's why it's just won Magazine of the Year from the whole games industry. (There again, it only won because Express hadn't been around long enough...)**

SOME OCEAN NOTIONS

I was interested to read your article on Mr Ward of Ocean Software regarding New Software for the more mature games user. I most certainly will not purchase any I have found these customer relations non-existent.

I returned on the 26th September 1988 an Amiga Wadisk which failed to load correctly, but no disk was returned.

I wrote again on the 3rd November 1988; no reply.

THE SOFTWARE BUSTING DEBATE

HARNESS THE CRACKERS

Re Gamesletters, Express issue 6. Having read this article through a couple of times, my reactions are as follows.

There is a lot of truth in the guy said. Firstly, he is a cracker and not a hacker or pirate. There's a world of difference. He is not out to make any profit from someone else's hard work; nor is he out to make any mischief, but is merely responding to a challenge. Most of us respond to one type of challenge or another almost every day of our lives. It also makes life interesting for the majority of people. OK, so his preferred challenges are cracking software protection. A lot better than cracking heads, sales etc.

Secondly, as the guy said, 'most of it's crap'. I think you will agree that one hell of a lot of games are just that - crap, and may possibly hold the attention of some adolescents for two or even three run-throughs. The crap in no way justifies the price asked and paid, I would suggest, by unrepentable darts, unicorns, centaurs or whatever, buying for birthdays, Christmas etc. These evil marauding, unrepentant people should be protected from paying with hard-earned cash for some of the software bilge on the market today.

Thirdly, the guy also said in answer to your question 'Why should friends give them to you if they spent money buying them?' - 'Because they get better versions of the game back in exchange, especially with games that are hard to play.' Software houses could learn something from that remark, such as different levels of play. It's just a thought—maybe they already do, but judging from the remark, they don't.

Surely software houses would benefit from supplying the cracker with a new game and letting him crack it and after it, only to see what came back. They could have a protection contract with the cracker. But why, both parties could be satisfied - the cracker's need for that type of challenge, and the software house by saving the cracker effort difficulty to crack, levels of play etc. Surely to goodness it must be an avenue worth investigating, and beneficial on both sides of the fence!

There must also be more to be gained than I have writ-

ten about. Let's face it: software houses are not going to stop the cracker legally or otherwise. So for goodness sake, they should get their acts together and have the cracker join the team, even if only on a pay for results basis. Better sanity about ground and working for them with all the benefits it must bring than underground having to spend money and time trying to beat him which can't be done. I'm sure you are following my drift. Eliminate the cracker by using him and his skills to your advantage, thus freeing time and money to catch the real villains, the pirates. The crackers can be left to this government.

Anyway, this is the view of a 35 year old Amiga owner, who, after a year of struggle with my machine, still can't access its libraries. Oh, for a cracker's assistance at this location.

C. Williams, Readington, Oxford

✓ **Some software houses already use crackers in various ways to help improve their games. But it's really not a solution overall. I suspect most crackers much prefer their own semi-dick battles with software...**

JUST CRACKERS

For the first time I bought your magazine on Dec 17th 1988, and I'm writing about your article on hackers and piracy. Your so called Hacker (Mr X) is not a hacker—he couldn't hack his way out of a paper bag!

Incidentally, is Mr X real? I so, he must be English! Also, I think you made this article up. I have hacked most disk software on most 6502 machines. All I use is a disk section editor and a machine code monitor. Your Mr X used final cartridge or something similar.

Rico, what was the point in stealing pieces of information when the average user of the final cartridge could just do a disk search for ThunderBlade to find out what track the relevant addresses were on. I was selling hacked versions of ThunderBlade before you got your copy.

Computers has nothing to do with hackers, but private bulletin boards do in fact have a lot to do with them. If you don't believe me, go into Minitel and the number should be on Prestel or Gnome at Home. Or go into Linsight and

page the typos and ask for some phone numbers. Here is a list of some games that I have hacked: Hyperports BBC Disk-ThunderBlade C64 Disk: Moon Buggy C64 Disk; and Operation Wolf C64 Disk.

I can hack most Novaledas. You should have given your hacker a challenge - ask him to transfer Exploring First from cassette to disk plus be invincible. If your Mr X can do this, then he is not a bad hacker because I can't. By the way if you ask any software by the Virus Man, then go around some of the bulletin boards.

My favourite hacked game is PRINCE 8802 version. It's on Minitel. The Virus Man, Scotland PS Newell Check Larry (PC version) out for a virus (he had)

X **What a remarkable missive. No wonder you're staying anonymous... Whatever, Mr X is indeed both real and English. He centred some salient details in the original because we didn't want to encourage any other hackers or crackers or pirates. In a similar way, we've centred your simply splendid spelling errors and linguistic oddities, since we don't want our readers to think that all crackers are, or, crackers. PS Your "news" about Laisane Suit Liar isn't news as it is Express readers who read all about it back in issue 5.**

IT'S A FAIR COP?

I would like my opinion heard in the great Piracy Debate. I offer receive copies of games from friends/colleagues, for instance Gungame Master.

I thought this game was so good I bought it. I do this with all the copies I receive - if I like the game, I buy it. If I don't, I wipe the disk. What could be fairer than that?

I had a copy of Pacmanite. If I had bought the game for £20 - £25 I would have been very disappointed (N3M disappointed) so I wiped the disk.

Obviously, I can only speak for myself, but I see no harm in the 'piracy' that I am involved in - I certainly don't rip anybody off, and I avoid buying games which would be a waste of my money. I'm a pirate, James, South Tyndale

✓ **Sounds suspiciously like an exercise in conscience-clearing. Do you really mean to say you go out and buy EVERY pirated game you think is decent?**

All I wished to know, had my disk been received or had it been returned but lost on the way – still no reply.

I have on the 30th Nov 1988 written to the managing director, still no reply.

I have now informed all my friends and colleagues as to Ocean Software's very poor customer relations, also possibly poor quality disks and advised them, like me, to purchase other producer's software.

Keep up the good quality of your magazine which makes very good reading at a very reasonable price.

Brian J Odum, Sheringham, Norfolk

X This matter is being checked through with Ocean even as you read this. It has to be said, however, that your difficulties come as something of a surprise since Ocean is quite possibly the smartest of all software houses when it comes to such matters. Certainly, if it happened regularly, David Ward's crew would long ago surrendered its position as the number one games publisher.

Having raised the topic, doubtless we'll now be deluged with tales of difficulties.

MAIL TALES

I am saddened to see yet another Mail Order Company (MOC) go to the wall. Not because they are out of business, but once again it is the customers who lose out.

So, where does the blame lie? Well, obviously with the MOC concerned, but also I think with the magazines that publish their adverts. I can usually spot a MOC who may run into difficulties: they run single and double page adverts, sometimes in spot colour, in several magazines, and they sell their goods at ridiculous discounts.

On average I costs £500.00 to run a single advert in one magazine and well know it is a mammoth. In order to cover the cost of the advert alone (let alone all the other overheads) they need to sell approximately £5,000.00 worth of goods. If you multiply this over say two weekly magazines and three monthlies, that monthly turnover has to be £60,000.00+. I reckon that is impossible.

So how can you spot a possible liability? Well, choose the company you wish to purchase from, and then pop down to WH Smiths and thumb through all the computer magazines. If they are prominent in all the mags with double page spreads in glorious colour – forget it.

So why are the magazines responsible? Well, they are so concerned about competing with each other and filling up their pages with adverts that they are blind to good business sense. If I buy stock from a supplier and don't pay for it within a reasonable time, they suspend further supplies to me. Do magazines do that? Of course not, they just print more adverts. Not until the MOC is dead and buried do they show concern for you.

So is a magazine liable for your losses? Not directly, but morally, most definitely yes, and maybe legally yes. They have a responsibility to you as their customers. If it can be shown that they acted negligently and therefore contributing to the problems, you may just have a case.

I hope that those of you who have lost money (and I'm sure there will be many) succeed in recovering your losses, but sadly I fear that it is money lost forever. But then there's something called Mail Order Protection Scheme....

Steve Bonnick, Managing Director, Future Publications Computers

X Though your comments are doubtless meant well, it really is taking matters a little too far to blame the magazines. Obviously, we're bound to say that. But we have a commercial interest in making sure that those companies who back out with an ill intended pay for their. And certainly don't want our readers to be ripped

Express-Complacent, Blase

I have owned a PC for two years now, and have been very satisfied with the high quality of Future Publishing's publications in that time. I therefore started to purchase New Computer Express, which, not surprisingly, is quite excellent, and certainly well worth £5.

However, I was utterly surprised and saddened to read your response to J. Tiddell's letter (issue 241) regarding his problems when purchasing computer goods. The simple fact is that he has a justified complaint, and nothing can justify – despite your weak excuse – what he has suffered. To say his problem is really an irritant rather than a "real complaint" simply because "at least you got a game that worked" is really appalling. No one in their right mind that customers should actually be grateful if they receive what they have ordered!

If you go in to a shop and buy something, you expect it to be as advertised, described, working and complete. In my experience, when entering computer stores, this is the exception rather than the rule. It seems that it is just fine if a retailer doesn't comply with his/her side of the deal (in law, a contract) so does this ludicrous situation apply to the customer? For example, if a retailer was given counterfeit money after handing over goods, I am sure you wouldn't take this calm, blase, forgiving attitude; in reality all he would break loose.

However, some retailers – and apparently you also – see little value in customers being coming into paying over their money, but not receiving the delivery/goods/service as agreed – and then having to engage in a virtual battle to get what they were promised and have paid for a good price. This simple fact is that this is not only a common, but becoming increasingly so.

We are supposed to be living in times of a buoyant economy and "market forces", but to me, I interpret this as really meaning "Customer lawless – you are about to be ripped off" simply because so many don't give a damn about reliability, complaint, and integrity these days, and so many, such as yourselves, are so tolerant of this.

To say or imply that a lack of goods that are advertised is because of the failure of the supplier is pathetic. If someone advertises, they should be efficient enough to at least ensure they have the goods or not advertise them! But too difficult to comprehend, is it in the spirit, if anyone behaved in this sloppy, unbusinesslike, care-free (and, I feel, arrogant and dishonest) fashion, pure anarchy would prevail and no one would be left; this is what you seem to

endorse. Why should manufacturers and retailers have a unique right to behave like this?

In a society which is becoming increasingly degraded, it is all too easy to forget how this type of "irritant" (your word) affects low-income computer users. For example, there are a great number of people not coming because of, say, severe disability, who spend most of their lives in front of a computer and £25 or so is a lot of money which they may have saved up for many months. OK, it might not be much to those Computer Express or even New Computer Express, but it is a fortune to some people who find it very distressing to save up and then something to do this, and then encounter this type of problem. You (conveniently) seem to have forgotten this.

I appreciate that caring about and considering other people is well out of fashion these days, but some £25 believe this is a better virtue than just amassing mountains of money from dubious practices.

It seems, it is this complacent attitude such as yours that can only lead to this type of behaviour increasing.

Apart from the ethical question and the simple fact that surely you should get what you pay for as promised without this insane pantomime of fighting with a retailer/manufacturer to supply what was originally promised, New Computer Express should spend a little time thinking about its negative attitude – presumably induced by its response to J. Tiddell – and also consider how this looks to its readers who, after all, are in the same situation as the writer. David J. Richards, Bellingham, London SE6

✓ Harsh words indeed, and many of your points are taken. But we are really not blase or complacent about the matter: we did after all help draw attention to SDC's failure to supply full goods and we have sorted the problem out for Mr. Tiddell.

It has also to be borne in mind that the complaint was about not receiving the instructions for – in this instance – a straightforward game. Our response would've been different had it concerned a complex adventure being supplied without instructions, or had the game itself not been sent. So please don't yoke us in to the moral decline of the nation.

It's doubtless very crass of us, but we're going to award you a prize for placing moral matters on the agenda. We'll send you a new PCW package. With instructions...

off when companies go bust without supplying goods that have been paid for. Occasionally, the odd outfit will slip through the net. When you're working on trust, that happens. But Express is especially vigilant: we'd be bankers to be otherwise.

PRIZE GUY

Your magazine is excellent, brilliant and super-duper. All the people that work at New Computer Express must be really talented and brave.

I have compiled a list (how original!) of why I should be the mystery prize winner this week.

1. I lied a little in the first paragraph.
2. All home computers are brilliant (I wrote this so as not to offend people).
3. I could not do for your magazine (it's good, but not that good).
4. I got nothing for Christmas.
5. I know somebody called Nigel.
6. Bros are all winners.
7. Blackburn Rovers are the best football team in the world.
8. The only game I have ever won is bingo when I was younger. Well, I'm not going to be older, am I?
9. I own an Atari ST.
10. My Mum and Dad are other than me. Paul Livesey, Stockport, Cheshire

PS Some of the above facts are not true.

✓ Congratulations, you're now very successful mystery prize of an million pounds. (This may or may not be a true statement.)

HELP SPRINGS ETERNAL

In reply to Mr Matthews' letter in Express issue 6, I have copies of both *Fahzzee* and *Cabbage* for the Spectrum in Basic that we use quite a lot. In fact they will play Cabbage almost every day of the week. (How I know there was a reason for me buying this PC).

Unfortunately my Spectrum is the 16K issue 2 model which I upgraded with a plus keyboard and 32K RAM upgrade chips, so perhaps I only have copies on tape. But if Mr Matthews would like to contact me, I should be able to give him the listings for both games.

Both games are very good considering that they are written in Basic.

Fahzzee can be adapted for numerous players, and unlike PC type games I have used, you play the full 30 games. There are two screens, the playing screen and the score sheet, which can be accessed at any time in the game.

Cabbage is a game for one player versus the computer, and is set to normal crib rules but it does allow for mixed runs when playing cards, you cannot win on the turn of a Jack, and the computer plays a mean game. Robert J. Miller, 39 Quaker Way, London SE15 6JG

✓ It's fair warn the cackles of your heart when one reader helps out another. In fact, we're such sentimentalists that we're sending the helpful R-type a prize. To wit: R-Type on the Spectrum.

* "Yet another mail order company goes to the wall"



How to be a smart PC software shopper



The world of PC software is endlessly baffling in its variety. Vast arrays of products all claiming to be the very best thing jostle for attention, each with different tech specs, prices and recommendations.

But which ones are the truly essential purchases? For word processing, general business, graphics, entertainment, music, utilities and communications, which packages will best fit your requirements without leaving you bankrupt? In the first in a series of definitive sector surveys, Express guides you through the minefield of choosing PC software

Since its introduction the IBM PC has earned a reputation as a hard-core business machine – the 'suit's computer. However, in the US it quickly became established as a home computer too.

And once it had penetrated the American household, the PC was subverted from its 'strictly business' demeanour – programming languages appeared, then graphics software, and games, and low-cost applications like word processing and databases.

In the UK, the PC hang on to its businesslike reputation much longer. Not until Alan Sugar launched the PC1612 did the PC begin to follow its American counterparts into the home. Now the UK market also supports a wide range of software, at prices from the sublimely cheap to the ridiculously expensive.

However, the industry continues to behave as though there were three completely different sets of PC users, with no overlap between these groups: the business user, the programmer, and the home user. If you're a typical PC owner, this makes it difficult to get information on all the different aspects of the PC because the business dealers won't talk about games and music, and the average games dealer doesn't know about PC applications like databases and spreadsheets.

To solve this problem, here is the Express guide to PC Essentials – the software packages that merit a place in everyone's program library. Unless you're after computerising your yard-labelling operation, or robotic control over shortwave radio, you should find this collection of classic software sufficient to equip you for every eventuality.

WORD PROCESSING

Just about everyone processes words ('writing', as the activity used to be known). But the PC boasts more WP programs than any other computer, and picking your way through the maze can be difficult.

Recommending word processors is also difficult because, like shirts and woolly jumpers, they're largely a matter of personal choice. However...

For those on a tight budget or with limited word processing needs, the first choice should be **Textword** (£30, Textware Software, 0642 438301). Although it does have some limitations, it provides all the basics for creating, editing and printing text which, after all, is what it's all about.

Further up the scale in performance as well as price is **Protext** (£90, Astris, 0733 238611). Protext is fast and powerful, and adds extra features, including a good spell checker, macro language and mail merge.

(Mail merge, if you were wondering, is a method of being obnoxiously familiar with people you've never met. It is how Readers Digest manage to send you letters that say things like, 'Imagine, Mr Smith, how a new Porsche 911 would look outside 123 Acacia Avenue'. What the author actually wrote was 'Imagine, [field], how a new Porsche 911 would look outside [field]', and the mail merge utility inserts the appropriate names and addresses.)

Finally, for users needing compatibility with a 'multitasking' word processor, **Multitext** 2 (£100, Newstar, 0245 266517) provides file conversion from the most popular business WP packages, as well as offering macros, spell checking, and the ability to edit multiple documents. To make handling this power easier, Multitext 2 provides on-line help. There's a pop-up calculator, too.

BUSINESS

The best buys for small-scale business applications on the PC are definitely the integrated packages – single programs that provide multiple operations.

Easily the best value must be **Mini Office Personal** (£30, Database Software, 0925 878888). It provides modules for word processor, database,

spreadsheet, and communications, and while few of these are especially brilliant they do allow you to swap data between the various parts, and there are one or two surprisingly good features like Postnet support in the communications module. Mini Office is a good choice for anyone who thinks they might need businesslike software on their home computer. At least, at the price, you won't get your fingers burned if it turns out you don't need it after all.

More professional and rather more powerful is Microsoft's excellent **Works** (£145, Microsoft, 0734 500741). It gives you much the same collection of applications – WP, database, spreadsheet, communications – but its main plus is the excellent on-screen help facility and series of interactive tutorial sessions.

Each of the modules is good enough to stand against most of the dedicated competition, and swapping facts and figures from spreadsheet to database to word processor is as easy as you could want.

Also worth a mention in this category is **Ability** (£19, Magnet, 01 493 2656). A similar collection of utilities to the others, it's a little slow at times, but very popular because it was bundled free with the Amstrad 1512 for a while.

GRAPHICS

The PC has a reputation as a poor graphics system. On the most common CGA-equipped PCs you have only four colours in 320x200 resolution, or 640x200 resolution in black and white only – nothing to get the average ST or Amiga owner excited. For this reason, PC graphics software tends to be overlooked.

PD and shareware for the real bargains

One of the great attractions of the PC is the enormous range of public domain and shareware software available.

Public domain, or PD, programs are free and you pay only for the disk, and the costs of copying, documentation and postage incurred by the library you buy it from.

Shareware is sold in similar fashion but you acquire only the right to evaluate the software. If you decide to keep and use the program you must pay a registration fee which is usually much less than the price of a comparable commercial program and which entitles you to receive upgrades and usually printed documentation and technical support.

Cynics might assume that anything free is worth what you pay for it – nothing. But there are gems in most PD libraries, often as good as anything available commercially. Furthermore, PD libraries are good sources for unusual programs that simply aren't available elsewhere.

Finally, free or cheap PD programs can be a good way of trying out new kinds of software. For example, if you're not sure whether you could make use of a spreadsheet, a PD program will let you try before you hand over your cash for a possibly expensive commercial product like **Supercalc** or **Lotus 1-2-3**.

Among the best and best-known PD software are: **Galaxy**, a full-featured word processor which works like Wordstar Professional but includes pull-down

obvious lines, circles, various brushes and fills, these include the ability to grab sections of the screen and use these as brushes, and various pseudo-3D effects like distorting images for perspective.

Unfortunately, cheaper programs that provide a reasonable degree of usefulness are thin on the ground. Salvation is at hand, however, in the form of public domain software (see the accompanying box for possibilities).

ENTERTAINMENT

If the PC was considered poor for graphics it was long reckoned to be laughable for games. Which is odd when you look at what's available because although the PC may not have as many games as other computers, it has as many great games as its rivals.

The classic PC game isn't really a game at all, although it is definitely first-class entertainment. **Flight Simulator** (£50, Microsoft, 0734 500741) is now in version 2 and although many simulations make the same claim, FS3 is the one that really is 'the nearest thing to being there'. With superb instrumentation, dazzling graphics and fabulous scenery, as well as odd-on sensory delights that cover most of the US, Japan and Western Europe, FS3 provides limitless fun.

If you prefer something more destructive, **Falcon AT** (£35, Microset, 01 277 49646) delivers. It is graphically excellent and offers various outlets for your aggression including ground target bombing missions and dogfighting with MIGs.

Adventure fans are well served with the complete collection of Infocom titles (£25 to £35, Mediagenic, 0734 311666), and the Magnetic Scrolls

menus for ease of use, and a spelling checker.

Warump: A database system that produces elaborate B+ tree maps cheaper than Ashton-Tate's £500 monolith, including report generation. It even supports networks.

Procomp: One of the best communications programs available, including commercial products costing up to £100.

Hack: A mammoth roleplaying game, similar to the Ultima series but using character graphics. Will trade, slay wizards, acquire heremendous amounts of gold.

Among the kinds of programs you can find in PD libraries that are difficult to acquire commercially are:

Composer: Music composition system that allows you to compose, play and print out your works of art.

PC Key-draw: A feature-packed graphics editor, good for creating technical drawings and diagrams. Features mouse support, but also usable from the keyboard.

Useful addresses:

Voicetr: 4 Royal Terrace, Glasgow, G3 7NT, tel: 041 954 6853, 11 Uddridge Street, Kensington, London NW8 7TQ, tel: 01 266 3218

Advantage: 56 Bath Road, Chesham, GL50 7HU, tel: 0242 224340

PD Software Library: Winscombe House, Beacon Road, Cranborne, Dorset, TNS 1UL, tel: 0892 663298

However, with the increasing use of VGA graphics adapters – providing 640x350 resolution in 16 colours from a palette of 64 – the PC is beginning to look a much better bet for graphics applications. (VGA, the forthcoming graphics standard, goes even further and puts the Amiga to shame.)

The outstanding buy in this category is **Deluxe Paint II** (£100, Electronic Arts, 0753 49462). It supports all types of graphic adapter – so you don't have to worry about compatibility, although it's obviously looks best in VGA – and it provides features more commonly found on the better graphics machines like the Amiga. Apart from the

library (£25, Bambard, 01 240 8831). While far out-playing games, **Ultima V** (£50, Microprose, 0646 54326) is the one to go for – a massive four-disk universe with hundreds of characters, dozens of towns and dungeons and a million ways to die.

One area in which the PC continues to be weak (largely because of its graphic limitations) is the traditional computer arcade game. However, two products worthy of a place in your collection are **Impossible Mission** (£25, US Gold, 021 354 3381), a classic platformer & ladder runner, and **Tetris** (£20, Microsoft, 01 277 49494), a game that almost defies classification.



Tetris is a fast-moving puzzle game, totally addictive and you can install it as a memory-resident program (so it's always available) for those rare moments when serious work loses its appeal. (Most companies ban Tetris very soon after its appearance in the office.)

Finally, breaking new ground in the PC games field is the *Franchise* range - *Driller: Dark Side* and *Total Eclipse* - (£30, incentive, £73/£6 77/£35) which combine aspects of adventure and simulation with a gripping plot and superb solid 3D graphics.

MUSIC

Unlike the perceived problem areas like graphics and games, PC music is a genuine desert. With an ultra primitive sound chip and a tiny built-in speaker the PC qualifies as the worst equipped computer for sound and music.

However, if you're determined, there are a few public domain programs around. See the PD Software box.

UTILITIES

Utilities are those programs that make using your PC easier and/or safer. And top of your list in this category should be *PC Tools Deluxe* (£50, Evesham Micros, 0388 785500), a collection of useful tools that allow you to recover accidentally deleted files, and even to get all your data back even if you format a disk.

The very first time you absent-mindedly delete a file representing several hours work, you'll consider it £50 well spent.

But *PC Tools* isn't just for the bad things. It also provides a disk cache for speeding up disk usage, facilities to optimise and backup your hard disk, and an easy-to-use DOS shell. Since *PC Tools* can also be loaded memory-resident it is particularly useful, and especially so for beginners.

One of the classic PC utility packages was Borland's *Sidekick* but this has since been replaced by *Sidekick Plus* which, although an excellent product, is bigger and more expensive and not 'an essential' by any means.

An alternative is *PC Deskmate* (Shareware, most PD libraries) which provides a calculator, calendar, limited notepad and DOS shell in pop-up form. Evaluation copies are available for a couple of pounds, but the shareware registration fee is \$25. A similar product is *Homebase* (£53, Brown Bag Software, 03 874 1105) which provides a database, text editor, calculator, calendar and contacts program.

COMMUNICATIONS

PC communications have a problem in the UK: the fact that most communications programmes in the US where they don't use our peculiar 1200/75 bps videodata systems which is obligatory for joining Prestel/Micros.

If you don't need videodata you have a far greater choice, but as it happens one of the leading communications packages - and among the best for value too - does support the Prestel format. *Mirror II* (£33, MDP Ltd, 0235 90491) is a powerful package with a macro language, the ability to run in the background (a sort of limited multitasking) and is easy to use for all its power.

If you have an Amstrad or new M2430 modem, you get a copy of *Mirror II* free, which is an excellent deal if you haven't yet bought a modem. ♦

PRINTERS

Next week, the Express Essentials guide puts printers under the spotlight. Which models really stack up? In each of the various categories, Express selects the very best. Don't miss it!

The in-sound and the fury

Part VII: As the industry's dirty tricks made Amstrad furious, so the firm's later machine launches made the industry puzzled.

William Poel proffers the penultimate episode in the Alan Sugar story

When it comes to being incontinent with rage, few can hold a candle to Alan Michael Sugar. He was at his most utterly furious at the time of the infamous "PC 1612a overheat" tale doing the rounds in autumn '86. The machines were said to be incapable of supporting certain types of power-hungry networking cards.

The story itself reached the rumour mongers, having been initiated by one of Amstrad's competitors (which was never publicly named, but is probably the reason for the cracks in the M25 as it passes by Brentwood). Some of the regular PC press who had taken a dislike to the abrupt manner of Amstrad leapt gleefully on this story, with their usual macho lust for bad news and scare stories. Mr S duly went through the roof.

A feature in the Sunday Times was quickly compounded by a leader in PC Business World... which was shortly afterwards the recipient of legal communications from an outraged Amstrad.

Proven lawyers

By now, Amstrad had decided that it should expand its staff base, and before hiring anything approaching a PR officer and department, it had chosen to put a lawyer or two on the books. And jolly zealous chaps they are too. If journalists and competitors don't manage to get "confused" by Amstrad's legal department, they aren't trying.

When Epson claimed proprietary use of the term LC (letter quality), the firm began to fix, as Amstrad decided to apply this to the range of printers. It was fun at the time, but the action fizzled out when Epson climbed down. But the real irony of all this is the fact that the term PCW was lifted (from Mizco, which had earlier launched the PCW1 computer wordprocessor). And the cute QA (office automation) logo on the PCW badge appears to have been originated by Panasonic.

With fans like that...

Along with the realisation that stakes in the business game attracted dirtier tactics on the part of competitors (who were generally not as comatose as those he had confronted in the world of home computers), came Alan Sugar's famous remarks on the subject of giving the customer what he wanted, and if that meant fire and pink spots, then so be it. The rabid old dog regarded this remark as unduly flippant from a man who was locked in mortal combat with the epitome of everything the City adores (BSM) and it has been quoted frequently when share analysts feel like haunting Amstrad when it is in the throes of one of its "downings". Coupled with the notion of selling "personal nuclear weapons", Mr S. was widely deemed a rare old cow.

and since Amstrad is a large customer of Panasonic, I guess an expedient blind eye was proffered.

Now, if anyone had tried to do the same with any Amstrad branding device, or even something zealous and brazenly likable with same, then stand by for writ to be nailed to the mast. This is commercially sound and thoroughly aggressive posturing, but typifies the 'one rule for them but we can do what we like' approach that soured relations between the increasingly billy-boy Amstrad and the rest of the trade during this phase of Amstrad's inexorable progress.

But the underlying lesson had been learned at Amstrad. The gloves were off. Now that it was in the big league for real, an air of secrecy descended on Amstrad Towers with a vengeance.



• Sugar: Public profile rising, but problems mounting

At the time, the money was on Amstrad to have a 286 AT ready to go, and there was conversation when only the 8086-based 1640 appeared in 1987. All talk of RAM shortages making it impractical was bluff. RAM could be diverted from the lowest ticket value items, if necessary.

Quite how and why Amstrad failed to produce a 286-based system at such a vital moment is still a mystery to me (and most others). It was unquestionably an error of judgement. I can only imagine that its great cloak of secrecy effectively prevented the man who needed to know about market trends from knowing that a 286 was a must for a serious presence in the business marketplace.

Just look at the success and encouragement Amstrad's lack of a 286 system has provided the clones and importers. Walters, NTS, Opus etc all have a huge sigh of relief when it was apparent that Amstrad had utterly missed its marketplace.

Meanwhile, other battles were being fought. The PCP portables launched in early 1988 were met by a mixture of astonishment (the price including a 3400 kb modem was not then much more than a modem alone) and hilarity at the indifference of the flip-up display. The LCD display was and is truly useless when compared to decent backlit offerings, and although as ever Amstrad excuses itself on the grounds of cost, I would wager that most PCP owners would pay an extra £50 for a serious LCD.

The impossibility of an internal hard disk and the rather 'modest' battery life both took the product out of the running for serious corporate users, but these seem to have been more customers willing to make do than three observers (including me) would have thought at the outset.

The Alan Sugar Story

Other end of the spectrum

Elsewhere, the Sinclair arm of the operation was continuing to defy gravity and sell significant numbers of virtually unchanged Spectrum machines. They were sporting a veneer with the (surprise!) 3" disk that managed effectively to blind the Amstrad 6128 and traditional Sinclair style. Prior to the +2A, the basic Spectrum remained largely untouched, ensuring no problems with compatibility. Then the +3 was a tempting opportunity for owners of earlier Spectrums to simply obtain a classier lamp of hardware without any software obsolescence.

It's a pity that the ST and Amiga challenge has (thus far) been declined. Both MFI and Loconet have the talent to give these machines a run for their money, and Amstrad has the money to give them the run, so to speak. Maybe it will yet emerge in the form of an add-in card for the PCs? Now that would be a creative solution.

So when 1988's launch lever began to build, the marketplace anticipated efforts to catch up and centralise the problems created by the missing 286. There was much speculation about PS/2 compatibility. Micro Channel Architecture and the rest.

But when the launch arrived, Amstrad broke its rules about pre-announcing, and showed a generally lacklustre range in the new PC200 series. It seems that as the quality of Amstrad brochures has gradually drifted towards the industry standard for gloss and panache, so the products have

Sugar bags airtime

When Alan Sugar appeared on the Wogan Show, there was speculation that his PR adviser had managed to wire electric shock apparatus to delicate parts of the Sugarist anatomy (his wallet). The aim would've been to prevent him rattlecasting into a typical Sugar trade against the establishment, thereby adding to the already substantial shock to the share price caused by the Stock Market crash. However, Sugar's performance was far from stage stuff, with his restrained performance replacing the customary incise wit and perception.

Since then, the great man has appeared on the box endorsing the Department of Trade & Industry's 1992 campaign, and is well on the way to becoming a minor celebrity. Sir Robin Day's Question Time surely beckons...

last their cutting edge.

The Sinclair PC200 also appeared last Autumn. This was recorded in the wake of the dull performance of the Olivetti PC1 - an almost identical concept and presentation.

In view of the strenuous efforts made by Alan Sugar at the launch to explain problems due to RAM shortage, it seemed as if releasing RAM in the curious PC200 was an act of some compensation. It, as he claimed, this was the reason for the late arrival of the sorely-needed 286 and 386 systems. ●

NEXT WEEK:

Whither Amstrad?

Just how does Amstrad stack up these days? And what is Alan Sugar planning next?

Mighty quintet steams in on cue

Andy Storer ventures into the future and takes to the skies to go off-world for a spot of strategy, billiards, and assorted carnage



BILLIARDS SIMULATOR INFOGRAMES

Out on the ST later this month is the first Billiards sim we know of, from French graphic geni Infogrames. Catering for either one or two players, it offers a choice of three cue types, differing values of cushion and table friction, rebound and spin effects.

The multi-viewpoint game also allows you to choose strength of shot, angle and ball placement. As it's French billiards, you won't be surprised to learn there are no pockets - this game's all about scoring points from caroms.

ARCHIPELAGOS LOGOTRON

In what sounds like an interesting fusion of Settlers and Kluge, you are floating above a 100-island world attempting to build bridges and find an Obelisk you must destroy. Your enemies are trees, eggs and a Beachcomber - a wanderer who turns land to

sand and sand to water. Featuring fabulous 3D landscapes, Archipelagos looks to provide a unique combination of strategy, in-depth gameplay and alternate reality. Due out in a universe near you on ST, Amiga and PC in spring.



F-16 COMBAT PILOT DIGITAL INTEGRATION

Riding the slipstream of Microsoft's Falcon, comes the latest sim off the General Dynamics production line. Due out on ST, PC, Amiga and OSA, Combat Pilot takes you from the preflight to the hangar, through pre-flight training to the cockpit of the latest hi-tech version of the F-16. There are five training

areas - air to air interception, counter-air operations, interdiction strike, battlefield ground support and reconnaissance - which need to be mastered before you can tackle operational status with one of eight squadrons. Work your way through the sorties and it's onto a multi-mission war game, Operation Conquest.



GUARDIAN MOONS MICROREAL

A varied five-stage multi-directional blaster featuring parallax scrolling and interstage animated graphic sequences that include 40 on-screen colours at any one time, Guardian Moons certainly sounds superior. With an additional level called Ridiculous - a complex demo of animated horizontal scrolling - you can bet it'll look very good too. The aim? Save the Earth by taking out eight psycho-killers by becoming one yourself.



CUSTODIAN HEWSON

From the same team of Huxley and Brownjohn that will one day bring you the long overdue Vermilion, comes this little beauty - a superior shoot-'em-up set in a tomb you must protect. You're up against waves of aliens and gain points by collecting energy-absorbing pods and destroying end-of-level guardians. To help you in this mission are shells and demolition rockets, electro bolts, fireballs, multi-plasmas, laser turrets, homing missiles and Megaclear smart bombs.



It's best to buy NOT one game BUT two games or more from the club that gives you TWO for less than the price of ONE

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Falcon Captain Blood	Falcon Captain Blood	Falcon Captain Blood	Rockin' Ranger Three Stooges	Elite Kermit	TV Sp Football (USA) NFL Ch Football (USA)	Starfighter 2 Starfighter	Football Manager 2 NFL Ch Football (USA)	Football Manager 2 NFL Ch Football (USA)
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AMIGA or ST	IBM	AMIGA or ST	AMIGA	ATARI ST	AMIGA	AMIGA or ST	AMIGA	AMIGA or ST
Gallegos's Domain Captain Blood	Star Trek Landing Horror	Xenon Starfighter	Pacmania Three Stooges	Purple Saturn Day Captain Blood	Monaco Captain Blood	Monaco Captain Blood	Monaco Captain Blood	Monaco Captain Blood
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Champ Baseball Champ Baseball	Scard of Gordon Xenon	Fair Blown Dreams	Supernatural Champ Baseball	Monaco Captain Blood	Monaco Captain Blood	Monaco Captain Blood	Monaco Captain Blood	Monaco Captain Blood
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AMIGA or ST	IBM	AMIGA	AMIGA (1meg) or ST	AMIGA or ST	AMIGA or ST	AMIGA or ST	AMIGA or ST	AMIGA or ST
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IBM	ATARI ST	AMIGA	ATARI ST	AMIGA or ST	AMIGA or ST	AMIGA or ST	AMIGA or ST	AMIGA or ST
Elite Traveller	STOB Star Wars	Batman Champ Baseball	Champ Baseball	Track Ball Manager NFL Ch Football (USA)	Track Ball Manager NFL Ch Football (USA)	Track Ball Manager NFL Ch Football (USA)	Track Ball Manager NFL Ch Football (USA)	Track Ball Manager NFL Ch Football (USA)
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SuperGame SuperTips

So, you were given a stack of new computer games for Christmas and have got bogged down on all of them. Here's the perfect antidote: expert playing tips on five of the season's best-selling titles. Time to dust off that wrapping paper...

● AFTERBURNER



The quickest way of reaching the later levels of Activision's conversion of *Afterburner* is to cheat! Start the game as normal, pause the action and type in AGESF (which is Sega backwards) and then press the > key to advance to the next stage.

● THUNDERBLADE



US Gold's conversion of Sega's helicopter gunship shoot-em-up has a built-in cheat mode to enable levels to be skipped. This is only available on the ST, Amiga and Spectrum. C64 owners will have to rely on skill and persistence to complete their version.

On the Amiga and ST, wait until the game has finished loading and the high score table has come on. When the digitized helicopter picture appears, type in CRASH. The screen then flashes to signify that the cheat mode is active. To skip straight to the next level, press the HELP key on the Amiga, and the UNDO key on the ST.

Spectrum owners have to press 2 for the joystick and keyboard option, then press T and C together. Again, the screen flashes to show that the cheat mode is active, and accessing the next stage is achieved by pressing the ENTER key.

● OPERATION WOLF

To make the C64 version of *Operation Wolf* a touch less difficult, the listing below provides infinite bullets, grenades and energy. Simply type it in, save it (just in case!) and then RUN it.

```
10 DATA 124,173,32,208,96,169,128,133,137,32
20 DATA 96,245,162,32,160,6,142,84,3,140
30 DATA 85,3,96,72,148,173,141,96,197,169
40 DATA 148,141,136,136,141,169,140,76,52,3
50 FOR A=8225 TO 8241:READ B:B=B+8:POKE A,B:NEXT
60 FOR C=61216 TO 61246:READ D:X=X+A:POKE I,A:NEXT
70 IF X=61255 THEN SYS 53230
80 PRINT "ERROR IN DATA"
```

Spectrum owners wanting to take a shot at the last level of *Op Wolf* can do so by loading the 128K version in 48K mode. Strangely, the program runs - and starts on level six!



● R-TYPE

Irene's amazing shoot-em-up from Activision is pretty tricky at the best of times. However, ST owners are treated to a useful listing below, which makes the game considerably easier. Enter the program in ST Basic and save it out for future use. Place R-Type disk A in the drive and RUN the program.

Lines 60 to 80 provide the following effects: 60 gives infinite credit; 70 installs infinite lives; and 80 retains collected weapons after the ship has been destroyed. By including any or all of these lines, the difficulty level of the game can be varied to suit.



```
10 ACOR=487000
20 FOR I=1 TO 37:STEP 2
30 READ WF:POKE ACOR+I,VAL("48"+WF)
40 NEXT I
50 BLOAD "RTYPE.DAT",4850000
60 POKE 4850004,48100
70 POKE 4850036,485026
80 POKE 4850024,486000:POKE 4850026,4862
900 CALL ACOR
100 DATA 4247,3F3C,0020,4641,46FC,2700
110 DATA 41F8,0400,43F9,0000,0000,003C
120 DATA 0000,52FA,20D9,51C8,FFFC,46F8,0408
```

GENERAL TIPS

(Spectrum version)

- 1) Reflective lasers are the most useful. The circular lasers are more powerful, but merely fire ahead and really only as effective as bullets.
- 2) On the fourth and fifth levels, it's best to stay near the middle of the screen, since aliens attack from all sides.
- 3) Hitting missiles only once in on objects in front of the ship, so if a target cannot be hit, move to the left of it.
- 4) Keep collecting the reflective laser icons; the laser beams grow in length and are thus more useful.
- 5) The large robots on level six cannot be destroyed; they must be avoided.

END OF LEVEL GUARDIANS

- 1) Destroy the guardian's eye, and then detach the force so that it lies against the head in the monster's stomach. It is this small creature which must be destroyed, and the unconcerned firepower soon sees it off.
- 2) Hover directly above the middle of the

guardian with the force at the rear. As the eye appears it contacts the force not the ship. Also, the snake cannot touch the ship in this position, but keep firing to destroy the snake's segments.

3) Completely destroy the underside of the ship, and then stay near to the yellow block, close to the ground. This way the mothership passes overhead without crushing the R-1. At the far end of the vessel, blow up the

blue gun and wait for the ship to stop. Switch the force to the rear of the R-2 and dispatch it along the top of the mothership, finally guiding it down to destroy the purple piston.

4) Destroy all the pods before the guardian appears. Put the force on the rear of the R-3, then wait in the bottom right hand corner. As one section of the guardian drops down the left side, shoot the daisy with reflective lasers or dispatch the force when it is in line. When the first part has blown up, move quickly across to the left hand corner and deal with the second section in the same way. The third section is then easily dealt with.

5) The guardian approaches from below, so watch out. A series of white blobs appear, and these are best dealt with by dispatching the force into the centre of them, dodging any that come near. When all the blobs have been removed, a ship is revealed beneath. Simply hit the flashing square to blow up the craft.

● BATMAN

Coscan's *Batman* game is a tricky arcade adventure which profits from a healthy *ROBOTECH*.

The following C64 listing should be typed in, saved for future use, and RUN. At the prompt, simply enter '1' or '2' for the correct mission, and make sure that the right piece is loaded or the program crashes.

```
10 PRINT CHR$(147)
20 FOR X=364 TO 403:READC=C+1:POKE X,Y:NEXT
30 IF C=4096 THEN PRINT "ERROR IN DATA":END
40 INPUT "DO YOU REQUIRE INFINITE EVERYTHING FOR PART 1 OR 2?":B
50 IF B=2 THEN POKE 394,255:POKE 395,126
60 SYS364
70 DATA 169,128,133,157,32,86,245,169,82,141,84,3,169
80 DATA 134,141,89,3,189,1,141,86,3,96,72,77,90
90 DATA 72,169,181,141,159,135,164,173,32,208,96
```



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● This week we review six of the best titles currently available for the PC.

Zak McKracken and Looking For Love (not forgetting California Games on the Amiga) go for an amusing approach, while Battle Chess and Strike Fleet offer more sedate challenges.

It looks like 1989's going to be a great year for PC owners!

BATTLE CHESS

ELECTRONIC ARTS

PC - £24.95

Also on Amiga

After debuting on the Amiga, Battle Chess was met with great acclaim for its graphics and sound, tempered by an average gameplay verdict. So, given the vast gulf between PC and Amiga specs, is a purchase worth the risk?

● GAMEPLAY

Featuring ten levels of difficulty and an opening library of 30,000 moves along with over three megabytes of 3D animation, Battle Chess sets out to beat up what might be termed the most active aspect of chess - namely the taking of pieces. Here, animated combat accompanies all captures and adds an element of humour to strategic manoeuvres.

As with most chess programs worth their salt, you can move by keyboard or mouse, reload and save games, set up positions for problem-solving, force, take back and suggest moves and replay whole games. In addition, you can also play games by modem, thus adding a new dimension to games by post or telephone.

Considering that on load the computer takes over 21 minutes to make its move you can be assured of some strong competition.

● GRAPHICS AND SOUND

We could only test Battle Chess on a CGA card but at the end of the day, graphics are not that important in Chess in any case. The pieces are nevertheless well defined and animation smooth enough, although once you've made a move you won't necessarily always want to sit through the sometimes painfully slow animated sequences.



CGA graphics: just about adequate

Luckily there's a 2D view of the board too, which dispotes of the more indulgent aspects of the game. Sound, which can be turned off and on, is not all that fantastic, and concentrates on supplying cartoon effect effects to the animated action.

● OTHER VERSIONS

The Amiga version does of course leave the PC one standing. In both graphics and sound there's a whole world of difference, but then you'd expect that wouldn't you?

● EXPRESS VERDICT

Not bad for a souped chess prog for beginners. While the strength of play is relatively weak compared to, say, Colossus X on the ST, Chessmaster on the Amiga or Sargon on the PC (with its library of 67,000 moves, there's still enough here to impress).



Andy Storer

CALIFORNIA GAMES

EPYX/US GOLD

Amiga - \$19.99

Also on Spec, C64, CPC, PC

Out soon on ST

California Games is another in the long line of very successful Epyx sports sims, involving six Californian-based sports events: Half Pipe Skateboarding, Fast Bag, Roller Skating, BMX Bike Racing, Flying Disk (frisbee to you and me) and the obligatory Californian pursuit - Surfing.

● GAMEPLAY

California Games allows one to eight players to compete or practise in individual or all six events in a bid to achieve the accolade of Californian Champion and win loads 'a' trophies.

Each event involve differing tactics with the basic theme of joystickwaggling at the right time and the right place, with the skill factor being on how successful you are at making these decisions. The events are in true laid-back Californian style, with obnoxious and skill manoeuvres helping you achieve far better scores and bonuses.

Half Pipe Skateboarding and Fast Bag place you on a static screen, while the other events are played over a horizontally-scrolling backdrop. Each event contains many nice little touches, such as sharks making an appearance when you get wiped out on the Surfing event, which help to relieve the game and add to its overall interest.



● SOUND

Audio-visuals are best described as competent but not outstanding. They certainly don't exploit the Amiga's graphics and sound hardware to the full.

The sprites and backdrops seem to be straight conversions from the C64 version, albeit with better resolution and colour. Surprisingly, the audio comprises non-sampled sound effects and tunes, making them sound clearer but a little simplistic when compared to the more conventional sound-sampling method.

● OTHER VERSIONS

The 8-bit versions can now be found on the compilation Games by US Gold, which also includes Out Run, Gauntlet II, 720° and Rolling Thunder.

● EXPRESS VERDICT

California Games is quite an enjoyable game, but it has got problems - namely a lack of lasting interest (due to its limited number of events), and each event being rather too easy to complete. Therefore California Games is probably best suited to the younger Amiga generation.



Rik Haynes

HOTBALL

SATORY

ST - £24.95

Also on Amiga

Hotball is a football simulation from a French software company called Satory, and includes its own



Computer controlled player about to score on own goal?

four-player joystick adapter (which doubles as an anti-gravity device).

● GAMEPLAY

Not much to say, except that the game is viewed in an overhead fashion on a vertically-scrolling pitch, with you playing against an opponent (either computer controlled or one of the possible three human players) in a timed match of football.

During play you have a range of possible moves such as kicking the ball at ground level, at 45° angles or into the air, which you have to master if you fancy your chances as footballer of the year.

Perhaps the worst feature of the game is the infuriating wait before play continues after scoring a goal - you want to get straight back into the action, not witness a crowd cheering.

● GRAPHICS AND SOUND

Audio-visuals are barely adequate, including jerky-moving sprites with only a few frames of animation and very simple sound effect effects.

Of particular note is the annoying sampled soundtrack which continually repeats a few bars of music and will either drive you mad or have you quickly reaching for the volume control.

● OTHER VERSIONS

Hotball is also available on the Amiga, but we haven't got our hands on a copy yet.

● EXPRESS VERDICT

Despite Hotball being supplied with its own four-player joystick adapter, it fails to provide an enjoyable game of football and isn't blessed with state-of-the-art audio-visuals to compensate for this deficiency.

Overall we'd go for International Soccer by Microdeal which is a better football sim in gameplay and audio-visuals, is £5 cheaper, and also has a four player option (the adaptor allowing this costs an extra £5).



Rik Haynes

NIGHT HUNTER

UBI SOFT/ELECTRONIC ARTS

ST - £19.99

Out in March on Spec, C64, CPC, Amiga, PC

Night Hunter allows you to take on the persona of a member of the living dead, i.e. a vampire, in a frantic search to seek out some holy medallions. These protect the general public from your blood-sucking exploitations. All this so that that old vampire, Count Dracula, can rule the world and live happily (well) over after.

● GAMEPLAY

Unfortunately for you, Professor Van Helsing, ace vampire hunter, has heard about your little adventure and has formed an army of vampire-killers and laid anti-vampire



Night Hunter can drive you batty at times!

traps which you'll have to negotiate in this platform exploration type game.

Luckily, as a vampire you can change shape into either a bat or a werewolf and back to a vamp again, depending on what type of hazard you encounter in your travels. On your travels you pass through some Gothic-style buildings, looking like something out of a Hammer horror movie.

● **GRAPHICS AND SOUND**

The graphics aren't too bad and contain some nice backdrops and sprites, although the sprites are a little on the small side.

The sampled sound spot-effects are simple but appropriate.

● **OTHER VERSIONS**

No details on the other versions are currently available.

● **EXPRESS VERDICT**

Night Hunter is an agreeable release, which conjures up a good atmosphere with its audio-visuals and gameplay, and will appeal to the expert and novice explorer alike.



Rik Haynes

PHANTOM FIGHTER

EMERALD SOFTWARE/MARTECH

PC - £24.95

Also on Amiga

Phantom Fighter is another scrolling shoot-em-up, one which supports some great backdrop graphics backed up by tough gameplay. It's designed and programmed by a now Ireland-based software design team called Emerald Software.



Vertically-scrolling shooting mayhem is level one

● **GAMEPLAY**

You've been given the task of controlling a spacecraft, and must travel through sand storms, volcanoes and lunar surfaces wiping out any alien craft that may meet along the way.

Fortunately, some of these aliens yield collectable pods which'll give you more powerful weaponry, which you'll need if you're going to take out the well-armed and armoured alien guardians at the end of every level.

● **GRAPHICS AND SOUND**

Visuals consist of very well designed backdrops, slightly marred by the average sprite designs that accompany them.

Audio supports the usual range of weapon and explosion sound spot-effects.

● **OTHER VERSIONS**

Phantom Fighter makes a superior audio-visual outing on the Amiga (of course but don't hold your breath for the ST version because Martech considers that 'the ST can't handle the graphics').

● **EXPRESS VERDICT**

For a scrolling shoot-em-up, Phantom Fighter doesn't provide a fast enough response to your control movements, which can be very frustrating at times. Having said that, the backdrop graphics are very attractive and the game is a toughnut to crack.

At the end of the day Phantom Fighter's yet another shoot-em-up without any truly outstanding features. Nothing new, nothing less.



Rik Haynes

LOOKING FOR LOVE

SIERRA

PC (CD-ROM)

Already out on ST

Given its full title, *Leisure Suit Larry Goes Looking For Love (In Several Wrong Places)*, you'd expect the sequel to 1987's adventure fantasy of the year to be well worth a look-in.

Judging by the original's recent popularity in The City, where venues made justifiable amends for the masses of pirated copies on the loose, this one's already got a guaranteed following. Which is, presumably, why it's appearing on the PC first.

● **GAMEPLAY**

For adult adults only, Larry wears Grecoan 2000 and a white suit with short spurs to the waist and a gold chain round his neck. He's the original blind date nightmare, the most negligible bachelor of the year.

Your aim is to make Larry score and, approximately enough, you do this by using the joystick. Mouse, keypad or direction keys will also move Larry from encounter to encounter, though, and once in position the hunt you're able to enter commands in English to interact with the other characters.

As with Infocom adventures, the parser is very smart and humorous, and once you've adopted the practice of looking and examining everything you come across, you're easily hooked. As the parser understands Flirt, Give, Gripe, Hold, Kiss, Lift, Play, Push,



A seedy and amusing reflection of life as a nerd in America

Smell, Swing, Taste and Touch, you can guess your main objective. And they're only some of the documented keywords!

You have to be outrageous to succeed in this game and, as the author states in the introduction, no-one ever caught a social disease from a keyboard. Using pull-down menus you can adjust Larry's speed or the volume of the accompanying music. Crucially, you can also adjust the Fifth level. Seeing as how this will usually default to the max, it's fortunate you can save games when you're exhausted.

● **GRAPHICS AND SOUND**

A 3D animated adventure which takes you from jet airliners to TV dating shows to South Pacific Islands, Larry's graphics are above average for the machine and, even with the usual negligible sound effects of the PC, add an element of humour to the mass avoiding you in the parser.

● **OTHER VERSIONS**

There might be an Amiga version out later this year, but for the time being only an ST version is definite.

● **EXPRESS VERDICT**

Great fun even for those who've never touched a bottle of Grecoan 2000 in their lives. *Looking for Love* is a stylishly packaged descent into the seedier realms of Raunchville, USA. As for the cover states, 'In the War between the Sees, don't be an unarmed innocent bystander'.



Andy Storer

STRIKE FLEET

LUCASFILM ELECTRONIC ARTS

PC - £29.95

Also on C64 (disk only)

Strike Fleet allows you to take on the role of a strike fleet commander in a naval wargame simulation involving various scenarios, each with its own tasks and objectives. Your ultimate goal is to become Fleet Admiral (picking up any awards along the way) should your strategic skills be sufficient.

● **GAMEPLAY**

During play you'll have complete control over your fleet, from choosing your flagship to deciding which module you're going to use to take out an enemy vessel; all controlled by clearly displayed menu options and in-game screens.

Adaptability is the name of the game, though, because the enemy will throw attacks at you from the air, on and below the sea's surface, therefore forcing you to adopt differing tactics as the game progresses.

Visuals are up to scratch with varied and attractive screens featuring a good use of definition and colour throughout (especially EGA graphics), although the view-

port section of the screen is rather small.

Audio is of the usual low quality due to the limited sound hardware found on the PC standard.

● **OTHER VERSIONS**

Strike Fleet is also available on the C64, where it fares better in the audio department but is only available on disk.

● **EXPRESS VERDICT**

Strike Fleet offers PC owners the chance to play a slightly different scenario from the average simulation, with a realistic and compelling representation of the myriad of tasks involved in being a strike fleet commander. It should keep the avid simulation fan occupied for quite some time.



Rik Haynes



Getting set-up in the ship yard

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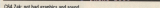


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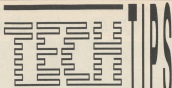
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HELP!

Memory problem I

I have a Sanyo 555-2 machine, which I have used for some time. I have become used to it, and it has proved to be very satisfactory. It was originally 128K, and I have updated by adding the 16 further memory chips provided by the makers so that it is now 256K. I have also put in a video board so that is now more or less IBM-compatible.

I have recently started to learn C programming and would like more memory. At one time Sanyo had a video board which provided an extra 256K, and they also sold a hard disk drive. Unfortunately, neither of these is available now.

I would appreciate your comments (or those of fellow readers) on these or any other options that may be open to me.

1. Fit larger chips. I have read about 150ns chips. Would these fit in the same sockets as my present chips? Would they all have to be replaced? Where could I get them from?

2. The Zortech compiler manual says: "fit a larger RAM disk". Is this something I could do myself? Could you suggest a source for the disk and what sort of cost might be involved?

DW Wilcock, Oxford

• Unless I'm mistaken, the Sanyo was one of the earliest "PC-compatibles" which - unfortunately - wasn't very compatible at all. However, it does run MS-DOS and offered pretty good value for money.

Unfortunately, being MS-DOS compatible and PC-compatible are two entirely different things. PC-compatibility means you can avail yourself of the enormous range of memory boards, video adapters, hard disk drives, and other desirable peripherals. As DW has discovered, the Sanyo doesn't qualify.

Expanding memory may be more diffi-

cult than you imagine. Fitting larger chips is a possibility, but you're obviously a little confused: the designation 150ns refers to the speed of the chips, not their capacity.

The first thing to do is to carefully peruse your manual and find out if the Sanyo is capable of addressing 512K. It ought to be, but designers have done stranger things. Next, find out the speed of your existing memory chips.

You can do this by reading the legends printed on their tops. If you used 16 chips to add 128K of RAM, it sounds like you've got 64Kbit chips, eight of which provide 64k-bytes. They'll probably carry a legend something like 4A64-12 or 4164-12, or 4164-15. The 64 part says they are 64Kbit chips, and the 12 stands for 120 nanoseconds, and 15 for 150 nanoseconds.

Although it's possible to use faster memory chips, you'll be safer using replacements of similar speeds.

So, assuming you need to address 512K, and your chips are 150 nanosecond DRAMs, you can try using bigger memory chips. What you want are 256kbit chips which will be designated 41296-15. If your chips are 120ns, you need 41256-12s, and so on.

On most PC-compatibles you need not only the obvious eight chips but also a ninth for parity checking, but from what you say the Sanyo apparently doesn't. Make sure. You'll need 16 for 128 of these to provide 512K.

These will cost about £8 or £9 each, depending on speed, and are available from most serious suppliers, but try Digistat on 0293 776688.

On your second point, RAM disks are not usually physical objects but part of your main memory set aside for use as a very fast disk drive. So this is simply another aspect of your memory expansion problem.

Finally, for practical as well as moral support, you probably ought to get in touch with the Sanyo MDC users group.

Write to MH Syed, Wistaria, 53 Acacia Grove, New Malden, Surrey, KT3 3BP

TIP

C64 coders

As each character has an ASCII value, the character with the same value as the required machine code expansion can be placed one after the other in a Basic line after a REM statement. For example:

```
1. POKE 770,21:POKE 771,8:REM
[SPACE][J][O][B][M][C][O][D][E]
Type as normal up to the REM statement, then to enter the code:
Press [SPACE], then [J], next the Commodore key and the [I] key and then the Commodore key and the [M] key.
```

The line must be the first line of the program. Do not put any spaces in the line other than the one after the REM.

When you list the line it will look very different to when you typed it. If it is, so if you make a mistake you can only change it before you list it.

The two pokes tell the computer where to go if the ISTOP key is pressed.
[SPACE][J][O][B]=JRS4A59 - initialise Basic
[J][O][B][M][C][O][D][E]=JMS47AE - run
J. Raybould, Chesterfield

HELP!

Memory problem II

Many thanks for your wonderful magazine which has left the competition behind. I would be grateful if you could help me to understand some things about my computer.

I have a Pioneer PX-7 MSX which has 32K RAM. When I switch it on I get a message on screen saying "28751 bytes free", which changes to "24450 bytes free" when the disk drive is connected.

Why the difference, and why not "32000 bytes free"?

Another question is, when I use the 32K expansion RAM pack to make a total of 64K RAM, why do I get the same bytes free messages as before?

A Munir, Thornton Heath, Surrey
• To begin with, 32K is not 32,000 bytes but 32,768 (four kilobytes equals 1024 bytes). So your free memory at power on is little less than 4K short of that.

As to why, I don't know for sure in the case of the PX-7, but all computers provide less free memory than they have total memory. The reason is simply that other things have to map into the memory space.

For example, your Basic interpreter, and the computer's operating system, use up some of your precious memory. Also, screen displays use up at least 1,000 bytes (40 x 25 characters), and more for higher resolution displays, or for colour screens.

So your shortfall in free memory is not at all unusual (Commodore Amiga owners are even worse off - their free memory is usually more than 100K short of the theoretical 512K).

Similarly, when you add a disk drive, you lose roughly another 4K. Some of

this is probably the disk operating system, some of it will be buffer space.

However, the situation with your expansion pack is more difficult to explain. The first question must be: are you sure it's working? If you have some software that you know for certain makes use of more than 32K of RAM then you can test it that way. Or you could write a Basic program to dimension a large array (200 x 200 ought to do it). If Basic runs this, again your RAM expansion is working.

The only other explanation may be that whenever you use the PX-7 operating system don't expect anyone to be using more than 32K of RAM, so the free memory messages don't reflect the true amount of memory in the system.

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So whether it's help offered or needed, write to: Tech Tips, New Computer Express, 4 Queen Street.

TIP

ST freezeze

ST owners whose favourite game doesn't have a pause mode may well be interested in this handy little tip.

First make sure you haven't got a printer connected, then press [ALTERNATE] and [HELP] at the same time. Your computer will then freeze up for approximately 20 seconds while it works out why it can't send any data to the printer.

This doesn't work with every program, but when it does it gives you that little bit of time to switch on the video, take the phone off the hook or rescue your dog from the jaws of your pet Doberman. Steve Barker, Norwich

HELP!

Budget DTP

Do you know of any good PD or shareware programs that would enable me to try out desktop publishing on a small scale without spending a fortune (I have an Amstrad PC1512)?

Ian Arnell, Portsmouth, Hants

• DTP software is among the most complex you can buy. It needs to understand graphics and graphic actions like scaling and cropping, all about fonts and typefaces including proportional spacing, and it has to be easy to use, providing a comprehensive array of command options including menus, key commands and mouse-control.

And it had better be written in something fast - like pure machine code.

This means no-one is likely to write a DTP program unless they've got a reasonable chance of getting some reward for their efforts. In other words, don't hold your breath waiting for suitable software to reach the public domain.

TIP PC file catalogue

Here's a useful tip for PC owners. To make a file containing the names of all your files (ie, to make a catalogue of disks) make sure that each disk is labelled, both physically and under DOS.

Then, create the catalogue file by typing DIR A: > CATALOG.FIL. Then for your other disks, put each disk in turn into the B: drive if you have one for use DOS's disk-swapping facility (if you have only one drive) and type DIR B: > CATALOG.FIL.

The catalogue file can then be searched using a word processor, or DOS's TYPE command, to find a specific filename and the disk it is on.

Hugo Morrey, Witton Gilbert, Durham



Your cheapest option at the moment is Timesworks Lite, a slightly cut-down version of the highly-regarded Timesworks DTP package, which sells for £49.95. It runs under GEM and provides most of the facilities you'll need for laser printer support, though.

It's available from Electric Distribution (0954 61258).

TIP Friendly Amiga

Ever fancied getting a nice, personal welcome from your Amiga every time you boot it up? Here's how.

When the Amiga starts up it automatically reads the STARTUP-SEQUENCE file in the S: directory of the boot disk. This file contains a set of ordinary CLI command lines like:

```
ECHO "Workbench 1.2"
This makes the Amiga echo the text in quotes to the screen.
```

First, though, you'll need to make a copy of the Workbench disk, since the original has no space for extra files. Insert the copy, restart your Amiga, and get to the CLI prompt as described.

Now make some space by typing **DELETE UTILITIES ALL** and **DELETE DEMOS ALL**.

You can now modify the startup program. At the CLI prompt type: **ED S:STARTUP-SEQUENCE**.

You are now at the (undocumented) text editor, and can use the cursor and delete keys to modify the text on the screen.

Those of a jolly disposition can even make their Amiga talk to them. Simply press **RETURN** to open up a blank line at the start of the file, then type in the following:

```
SYSTEM/SAV "Greetings Master,
Your slighest wish is my command."
```

Then save the file by pressing **IESCI** and typing **GO** for exit and **RETURN**. You're then back at the 1-CU prompt.



• Amiga 500: Will it talk to you?

Wait for the disk drive light to go out, then reboot your Amiga and...it speaks to you!

You can put any text you like inside the quotes of the SAV command and have any number of lines of SAV commands. Brian Templar, Stroud

HELP! Star driver

Having just bought a Star LC-10 colour printer, I eagerly awaited the great colour print-outs that all the reviews spoke so highly of. To my horror not an inkline (you understand) of colour could I squeeze out of this impressive piece of equipment.

Monochrome print-outs using Degus (not Elite) were excellent but I

was visualising Bugs Bunny in glorious Technicolor.

Can you suggest where I can find a printer driver for the wonderful LC-10, or any art packages that would run the printer to its full dumping facilities?

Justin Bassin, Thames Ditton, Surrey
• Another victim of the great printer driver saga.

First, check your list of printer drivers in Degus. Although you're not likely to find the LC-10 (it's a recent printer and Degus is old software), you can try any driver for a colour printer. There's a reasonable chance that one of them will work but it must be a colour printer driver.

Second, get in touch with any of the national ST user groups or public domain libraries - these are the best source of non-commercial software like printer drivers.

Third, you could try the Cyber series from Artic (distributed by Electric Distribution, tel 0954 61258). Part of the series includes a library of printer drivers for a variety of printers including Star.

TIPS Amiga file handling Ribbons rejuvenated

Here are some tips for the Amiga 500. As single-drive users know, to copy files from one disk to another you must first copy them to RAM. For example:

```
To copy all the files in the 'C:' directory to another disk
Copy ram:all to disk:
```

I also have RAM included in the path, so I also have some commands in RAM which I use for accessing other disks without inserting Workbench all the time. So to copy files from RAM to a disk means that the commands are copied too, which I don't want. To avoid this I go

Make disk ramstore
Then I lock or protect store to prevent it being deleted.

Lock ramstore
Then to disk

Copy ram store all to disk:
The I delete the files in store so that I can use it again.

Delete ramstore all
Store itself is not deleted as it is locked.

Type delete ram:all
and it won't work as RAM is a device.

Type delete ram:all and it will work.

In issue 5 there was a tip about printer ribbons. Well something similar can be done with the ribbons of an Okimate 20 printer, colour or black and white. When the ribbon is nearly broken, the used ribbon is wound up on the left reel, it then pushes a lever and stops any further advance. To get that extra bit of ribbon, which can last quite a while, you must prise open the cartridge. It's quite easy - just insert a small screwdriver or something into a hole in the side of the cartridge and twist it a bit. When it's open, take the larger reel of ribbon off the plastic wheel and discard it. Tape the end of the remaining ribbon onto the wheel, wind it on a few turns, and that should do it.

I have lots of Fish and PD disks, if anyone wants a copy, just send a disk plus a stamp for return postage.

P.S. Can anyone send me a printer driver for the NEC Prowler P2200. I've tried lots of drivers and none are good enough for graphics as they're all for 9pins. George Garven, Kilmarlock

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The Word

Word processing is more than just bashing out words on screen. Peter Worlock explains the subtleties, complexities and infinite varieties of wp features

Just about every business PC in the world gets used for word processing or some time, and many business PCs do nothing else.

And at home, just about everyone writes something every now and then - and you don't have to be an author or journalist. Employees in all kinds of business occasionally have reports to write, teachers and lecturers write up course material, students write essays, and we all write letters - to magazines and newspapers, begging letters to the bank, torrents of abuse to credit card companies etc.

For most writers, the first requirement is a printer. Although it is possible to send floppy disks, we're still a long way from the paperless existence that computer manufacturers used to talk about. The second requirement is some suitable software.

There are WP programs costing several hundred pounds, and there are others in public domain libraries that will cost little more than the cost of a blank disk. But if all you're doing is putting words on paper, via the computer's screen and memory, why the guff in pricing?

As always, you get what you pay for, and although all word processing programs will let you compose and print a bit of text, the ease and speed with which you can do it varies enormously.

The basics

Just about all programs will let you type at the keyboard and show you what you've typed on the screen. By various combinations of control keys, menus and mouse actions, you will be able to edit what you have written; delete some words or sentences; insert new material; correct mistakes; break sentences and paragraphs into shorter units; or join scattered portions of the text.

Generally, you can get your text reading right, and looking good. You can then save it to tape or disk for future reference, and/or print out your document on your printer.

At this stage, what you're gaining over using a typewriter is the ability to edit, revise and correct without having to use a lot of Tippiex or using up reams of paper in re-typing the same text over and over.

However, WP programs also introduce a lot of minor aspects of writing. For example, on a typewriter a bell rings to let you know you're printing near the end of a line. This is so that you can work out whether your next word or two will fit, or whether you should start a new line. WP programs handle this automatically through a facility called word wrap.

Also on a typewriter, it's possible to get as engrossed in your work you suddenly find yourself typing off the end of the paper, producing ugly pages in the process. With a

word processor this comes to be a problem because the software lets you put page breaks wherever you want.

These and other aspects come under the heading of document presentation - how your text will appear on the finished pages. When using a typewriter you have to bear these things in mind as you type, which can be extremely distracting. And mistakes in typing can cause you a lot of extra work.

With the word processor you can concentrate on what you're writing, leaving the presentation aside until after you've finished creating the text.

Paying for power

As you move up the price scale you're paying for extra power. These extra features fall into a number of different categories.



• "There's little excuse for poorly written, badly spelled text."

Some are additional controls that make using the software easier. For example, you find more ways of moving around your document. Obviously you can move forward and backward a letter at a time, or up and down a line at a time. But more flexibility makes a program easier to use, so some packages provide ways of moving by word, sentence, paragraph, screen and page.

Other enhanced features include more powerful editing facilities. Among the most useful here are cut & paste, and search & replace.

Cut & paste allows you to mark a block of text, which can be anything from a single word up to several pages. Such a block can then be deleted (much quicker than deleting a character at a time), or cut from one place and pasted into the

document somewhere else (hence the name), or copied without deleting the original block and pasted elsewhere.

Search & replace is an extremely useful tool, especially if you create long documents. Imagine a multi-page business report, or an essay in which - when you thought you'd finished - you find you've misspelled a key name. With search & replace you specify the misspelling and the correct version, and the software then automatically goes through your document, correcting every instance of the mistake.

Other features fall into the category of document presentation, starting with the ability to use basic type variations like bold, italic and underlined type. Some primitive WP packages use special codes which appear on screen but act in the printed document, which means that you can be misled as to how your printed pages will look.

A better solution is to show such effects on screen by display effects like inverse characters, or by using different colours. Best of all are those packages (usually on the ST, Amiga and Macintosh although also found on the PC) which actually use bold, italic, or underlined type on screen.

Also in the category of document presentation are headers and footers. These two devices are more or less identical except that, as their names suggest, one appears at the head of a page, and the other at the foot. Headers and footers are pre-set pieces of text - often only one line but sometimes more - which can be as simple as your page. They can include your name, address and telephone number, for example. Or a running title, or chapter and page numbers.

One feature that not everyone needs in their WP program is a word counter, but you'll often see a package packed in computer magazines because it doesn't have one. The reason for this is that professional writers live and breathe numbers of words. In the case of freelance writers, you get paid by the word so it's vital to know how many words you've written.

But even editors' writers whose pay is secure need to know how much they've written. Journalists and authors who turn in work that is consistently longer or shorter than an editor wants become very unpopular.

Designer docs

Any word processor worth the name will let you produce neat, properly written documents. With the usual clutch of editing facilities at your disposal, there's little excuse for poorly written, badly spelled text.

However, the more advanced WP programs go much further, allowing you to turn out pages that are things of beauty, a joy to gaze upon.

• **Multiple fonts:** Although too many fonts are like too many cooks, the ability to use one or two font changes in a document really lifts your pages out of the ordinary. However, being able to do so depends on your printer having the facility, and your WP software being able to drive your printer. (We've talked at painful length about this in the last two instalments of the Learning Curve.)

• **Multiple columns:** The ability to create text in two or more columns, newspaper style, is not one that you'll want to employ in your business letters. But in reports it can be useful, and a good word processor with this facility may save you the cost of a desktop publishing DP program.

• **Imported graphics:** This is a definite plus for many word processing applications. In business you can import charts and graphs, others can use drawings and sketches to illustrate a point, or you can create your own hand-drawn stationery, or simply brighten up a personal letter. And again, if your WP software can do this, you may not need a dedicated DP program.

• **Footnotes:** One for the academics, and not to be confused with footers. A footnote is an explanatory piece of text at the bottom of the page which contains the thing being explained. •

Easier can be better

It has been said that word processing can make writing easier, but it can't make writing better. In fact it can, in certain ways.

For example, even the best writers have certain spots when it comes to spelling, and poor spelling tarnishes your image as a writer. So an automatic spelling checker can do wonders for your image - as well as being easier than reaching for the dictionary (usually buried on a distant bookshelf) and looking up the correct spelling - which can be difficult if you don't know how to spell the word in the first place!

As automatic thesaurus can add even more gloss to your printed documents. If you're struggling for just the right word, a quick key-press will bring up a range of possibilities, saving you long stretches of agonised staring at the screen. Or if you find you've used the word 'awful' too many times in your letter to the credit card company, the thesaurus will point out that you could also use 'impeccable', 'spotless' and 'atrocious', not to mention 'terrible' and 'ghastly'.

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Commodore on top of the World

According to one of the leading market research organisations, Commodore is wrapping up Europe's second largest supplier of computer hardware, second only to the mighty IBM corporation.

Dataquest, the research group in question, reported that sales of the Amiga range of computers are booming and Commodore's range of PC compatibles are also in great demand.

According to Doug Barrett, UK marketing manager, first quarter profits to September 30 1989 were up by 15 per cent on £4.4 million compared to the same period the previous year. Much of this rise can almost certainly be credited to the rise in popularity of the Amiga.

See the Light!

Graphics have always been the Amiga's most powerful feature but of all the different graphic applications and techniques available, Ray Tracing must surely be one of the most popular.

Ray Tracing is one of those applications revolutionised by the arrival of the Amiga, and already several heavy weight packages exist - including the new famous Sculpt 3D (and now Sculpt 4D) and TurboTracer.

The latest arrival on the scene is a package called Octalix, distributed in this country by the Amiga Data Centre (011 957 4342). Taking everything with a pinch of salt, hobby sites, the American producer, claims that the package is the most powerful ray-tracing program of its time.

The program uses a straightforward menu system which takes you step-by-step through

What! Another Elite Cheat?

Yes, another cheat for Finbar's classic space opera Elite. The aim is blame for this little beauty is a certain Rob Taylor who is a regular reader of Express and, in particular, Amiga! (wise chap).

This tip allows you to modify most of the activities of your galactic commander with a handy back screen kindly provided by Finbar but until now hidden from view. This back screen lets you modify the individual bytes that determine the status of your commander and his ship.

To access this handy screen, when you're asked to enter the code to enter the game, enter SARA and then once prompted a second time, enter the correct code to enter the game. When prompted "Lost New Commodore?", type N and then press the Enter key and you will find yourself in the Elite hacker's arena.

Message Port

If you have any comments about any issues raised within this column or the Amiga scene in general, why not drop me a line? Equally, if you have any tips that will help other readers get the most from their Amiga then why not share them with your fellow Amiga owners? Write to: AMIGA BLIT, New Computer Express, 4 Queen Street, Bath BA1 1EA.

You will be prompted for a byte to change and, as the new value is assigned to that byte, by changing the value of particular bytes, you can customise your ship and your status. Once you've finished being enlightened, simply press the 'Escape' key and you're away. Below is a table of the major bytes.

ITEM	BYTE TO CHANGE	NEW VALUE
Monitor	21	Not more than 4
Large-Cargo Bay	22	01
SCN System	24	01
Port Sponges	26	01
Escape Capsule	28	01
Energy Resin	30	61
Extra Energy Unit	31	81
Locking Computers	32	81
Scientific Hyperspace	33	80
Beam Reactors	34	80
SCN Jammer	35	80
Choking Device	36	04
Outgoing Relays	38	04
Thyroid Document	40	01

Rating

File Name to Elite	81	00 70 08
Fuzgine	90	61
Officer	91	81
Leadsmen	92	7F
	93	7F
	18	7F
	18	7F

A word of warning when hacking away. The value of byte number 21 must never be set to a value greater than four or the machine will collapse literally in the way it knows best - by crashing.

Other attributes, such as your ship's life span, can also be changed by modifying the value of the particular byte; but I'll leave that for you to discover. Experimentation is the key!

Jason Hibbors

Snippets.....

* Rumours from the States indicate that Commodore will be on the verge of standardising AWEX, a command line language originally developed on the IBM mainframe. AWEX is a vastly superior command line environment similar to the GNU which allows complex programs to be developed easily. Many commercial packages such as Crystalaid already incorporate facilities to link with the AWEX environment.

* Very Early test versions of the new Workbench/Relistat release, 1.4, are already being distributed to software developers in the States, who are participating in beta-testing. Don't get too excited, though, we're not likely to see 1.4 before the end of '89 at the earliest.

* Rumours (yes merely) circulating around the Amiga scene indicate that Commodore US may produce a games console based around the Amiga. This move seems very much a retaliation against the recent announcement by Atari of its plans to produce a sub-£100 console based around the ST. This would in fact be quite ironic when you consider that the Amiga was originally designed as a games console.



Spect-ed soon

It's encouraging to see us Spectromancers about being left out of the fun in these days of 16-bit mega-games. Some of the ST and Amiga titles which have turned up a shade of even more green at a headach-inducing time for me in Caster Command.

Probably the most disconcerting title for me is Caster Command. The original ST version received huge critical acclaim and used up whole books of reviewers' good game phrases. It's an intensive mix of simulation, strategy and shoot-em-up as you take the helm of the AOC Equinox, an advanced aircraft carrier with a useful selection of weaponry.

In the dark

Call me a square, stick-in-the-mud, party-poopng old cynic if the urge takes you, but personally I think the whole computing industry has become decidedly boring of late.

The only company coming up with original and innovative Spectrum software is Incentive. Software houses are constantly inventing new, revolutionary features which supposedly change the face of computing, yet few do. Freespace must rank alongside Ultimate's Flimble, Rigsiders, Head Over Heels etc) as one of the truly ground-breaking programming techniques.

Its latest Freespace outing Total Eclipse has already received more than its fair share of pligs, but here's another teeny weeny little mention for the game which helped preserve my sanity over the Christmas period (no mean feat when they show The Sevens for the sixth consecutive year).

Out of the three games to enjoy the Freespace concept, this Egyptian-inspired jumble is my favourite. Why so? Well, the playing area is much more confined, which means you don't get lost quite so regularly, and the screen updates slightly faster than in Dark Side. The whole shebang is more snappy. In short, it's one of the best Specky titles of 1988. Now all I need is a few more kind, considerate and generally wonderful human beings to send in a solution.



I have had a short blast on a friend's ST (don't worry, I washed my hands afterwards) and despite being determined not to like it, after a few minutes' play I was hooked. Make no mistake, Caster Command won't be converted without a struggle. Super fast 3D tiled graphics, multiple viewpoints and a playing area which makes almost everything else look postage stamp sized are not going to be easily fitted into 48K.

Realtime Software was put on the case and if anyone else dares, there are the guys. Remember, they've produced classics like 3-D Shooters and Rigsiders in the past.

Previous reviews look impressive, but at the end of the day a game's worth can only be

judged by how it hangs together and plays as a whole. Due out at the end of January, I want to be first in the queue to see how Caster Command does.

Also due on the Specky scene is 38 in Starfighter II. This was another 3D filled graphics mega game, and a sickeningly good one at that. It came in just after Caster Command in the 'Express Games of 88' feature (page 118) and in my worthless opinion starts about right.

It relied more on visual brilliance than gameplay, which hardly bodes well for a Specky conversion. The many details yet, save that its likely to consist of wave-borne graphics rather than tiled 3D ones.

In its 16-bit incarnation, Xenon was acutely quickly it had beautiful, glowing chrome structures and finely shaded ships. On the Specky everything looks decidedly blue. The demo version I played was smooth and quite addictive, but as the whole is a fairly unremarkable horizontally scrolling shoot-em-up. Other titles set to make the transition from 16-bit to 8-bit are Captain Speed, a graphically superb space opera, and Emissary, a 2D scrolling blaster from John Phillips (of Nebulous fame).

The fact that so many seemingly safe and difficult conversions are being attempted really does show the commercial doubt the Specky will go.

Come again?

Jet Set Willy, the game that excited your granny some time in the prehistoric days of computing and gave plenty of opportunity for double entendre jokes, is back on the shelves, thanks to Mastertronic.

If you admit to buying this one first time around, you're really going to show your age! Anyone too young to remember it need only know that it's one of the touchstones of the whole platform and ladies games. JSW has got a lot to answer for.

Spiritual exercise

Whilst most other companies have abandoned Specky owners of an administrative persuasion, Level 5 deserves a hefty pat on the back for unqualified support. Having just about exhausted the possibilities as far as games are concerned, its next game, called Spirit, sees you play a ghost trying to avenge his murder. Wilky or what?

Specky Mac emulator.

I have just heard from one of my spies in the industry (OK, so I exaggerated, it was a friend who went to the December Macworld that Computer has launched a very interesting package which could allow your Spectrum to do a passable impression of the Apple Mac. Priced at £49.95, lets you have an icon-driven front end and includes a keyboard mouse. And this is on the machine they call humble! Details from Kempton tel 0908 677888.

MOT's DIY

MOT has stepped in to combat some of the +2A incompatibility problems mentioned in Express 6 with the release of the Fixit, a small widget that should allow successful connection with a host of add-ons. MOT's own +D and Disciple interfaces are covered for as well as the Opa Discplayer and Microdrive. MOT's attitude is commendable, but I can't help thinking it should be Animate first providing a remedy.

The Fixit costs £1.95 direct from MOT, Lakeside Technology Park, Phoenix Way, Swavesey SAT 92ET.

Robin Atjary

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YOUR FORMAT



European view

Germany has a large user base for the C6 and this is hardly surprising since every electronics store supports mainly the C64 as an Amiga. Even walking through tiny villages there will be a shop window C64 in sight.

Most items in Germany are expensive, but I'm glad to say electronic gadgets are not cheap. You could pick up a C64 with all the necessary bits and pieces for under £39 and an Amiga for under £320. That's the advantage of having Commodore's European base in the same country.

One fact worthy of mention is that even though there were machines everywhere, they didn't have much software. It was mainly Powerhouse and other budget titles, although software for the Amiga was pretty new.

Passing through France we picked up quite a few French computer mags. Many of them seem to borrow ideas from British ones – or is it the other way round? I'll give you a clue. They all feature lots of smiling or grinning faces.

Wiggle listing

This listing will make your whole C94 display wiggle with inertia. The program also has few instructions: for example, `[CLR HOME` means that you must press the SHIFT and

Wiggle listing

- ```

9 PRINT CLR HOME$PAGE WMT"
10 RESTORE R=49152
20 FOR L=0 TO 99:READ A:POKEB(L,A),A:L=1+L
40 DATA 1,209,189,181,241,20
50 DATA 3,169,131,141,20
60 DATA 3,88,96,169,48
70 DATA 1,141,138,382,0
80 DATA 173,141,181,238,21
90 DATA 192,141,22,208,181
100 DATA 8,136,208,253,232
110 DATA 234,176,208,237,166
120 DATA 207,141,21,232,238
130 DATA 40,162,166,27,141
140 DATA 17,208,189,1,141
150 DATA 25,208,169,127,141
160 DATA 13,238,169,129,141
170 DATA 26,208,169,48,234
175 IFB=90575HEXPRINT "DATA ERROR" :END
180 B=49408
190 FOR L=0 TO 99:READ A:POKEB(L,A):NEXT L
200 DATA 206,201,202,202,203,203,203
210 DATA 204,204,204,204,205,205,205
220 DATA 205,205,206,206,206,206,206
230 DATA 206,207,207,207,207,207,207
240 DATA 207,206,206,206,206,206,206
250 DATA 208,208,209,209,209,204,204
260 DATA 204,204,203,203,202,202,202
270 DATA 202,202,200
280 FOR L=0 TO 99:READ A:POKEB(L,A):NEXT L
290 FOR L=0 TO 99:READ A:POKEB(L,A):NEXT L
300 PRINT CLR HOME$
310 PRINT "BVS OM"
320 PRINT "BVS OM"
330 PRINT "BVS OM"
340 PRINT "BVS OM"
350 PRINT "BVS OM"
360 PRINT "BVS OM"
370 PRINT "BVS OM"
380 $S49152=POKEB(49408),390

```

CLR HOME keys while inside the speed marks. That also goes for "THIS ONE".

If you have entered the data incorrectly the program will tell you. Lines 330-370 are the data for the inertia of the wiggle. You can change it yourself, making sure you stay inside the data boundaries. Wiggle effect is also like the ripple effect on water. The program runs under Interrupt, so you can still move your cursor and code.

## 1989 release

Est. C64 games heading your way this year: 400.

## Technoscop • Derwent

But only any day now, Technocop takes you on a very high speed car chase against the bad guys. You also get the chance to step outside and fight 'em in the



\* Technology: Due soon

## Baby's First House • Domestic

Due out early this year. You must all know how boring the TV program is, so let's not say too much about the game. Could be good family entertainment, though, so keep an eye open.

• Microgrusec/Paragon Software

This series of comic characters should soon be making their computer debut on the CD.

Thanks a million

We've got thoroughly out of synch these past few weeks what with shooting off to Germany, so a big thank you to Rick Numa, who helped us out in issue 5. Thanks also to Jason Heiborn for his kind comments on our Arma3 demo in *Amiga800*.

Printing error

In the Christmas bumper issue we put together a little computer teaser. Unfortunately, there was an error. The answer to question 2 should have been 2 bytes to a word not 35.

Hubbard, Lowe

An American friend phones to tell us that Rob Hubbard has composed plenty of tunes since he left England for California. One of them was for a game called *One on One*, which I heard over the phone. Being Rob Hubbard a soundcut 100 per cent cool, with very clear samples. He's also done tunes for other games, but we'll probably never hear them as only the best American synthesizers in computer music have

## Chests

Here's where you the reader can contribute. If you have any cheats, tricks or tips, send them to C&A CHEATS, New Computer Express, Future Publishing Ltd, 4 Queen Street, Bath BA1 1UE.



## Firm - where?

The good news of CPC sales makes it all the more regrettable that, as reported here before, Christmas, Asatraz had allowed the Firmware manual to go out of print, and his replied with a simple "No" to enquiries about a reprint. If anyone knows where copies can still be found, I'd be grateful to hear from you. Write to CPC Centre, NCE, 4 Queen St, Bath BA1 1BJ.

## Let's get serious

The CPC did fly well this Christmas, contrary to what might have been predicted. Canon, Lasika, Sionco and the apparently named Yon/Yas (after boss Lazarus) were among the high street chain stores offering discounts, and shifting considerable numbers of boxes with "CPC" written on them. In isolated cases you could have got as much as £70 off a £120 - which, as independent retailers bitterly pointed out, was less than they could buy in lot!

Sales of software and peripherals have also been encouraging, taking stockists by surprise. Ken Farnham of K&M Computers, the CPC mail order people, claims that "sales over Christmas were 3,000 per cent up on last year". Disk drives and modems were selling well until supplies ran out in December, and TV tuners, speech synthesizers and printers were all selling quickly. He claims too to be selling ten copies of Mini Office II a day, and 5,000 (that's three times!) 2" disks a month. "Sales are booming and going up," Ken added. By way of explanation, he could only suggest that Asatraz had had spare capacity at the right time and had produced a batch just when it was needed.

The story from Mike Cooper of NUC Supplies is similar, with claims of selling "twice or three times as much" as the previous Christmas. "There are signs that Asatraz and some of the software manufacturers may be losing interest in the CPC", he comments, "but the truth is the demand is still very strong, and there's no reason to expect it to dry up in the foreseeable future. At least, I hope not" near, here.

## Sound of silence

When I last bought my £120 (seems like centuries ago - how did I ever manage without it?), I foolishly assumed that all I had to do was plug a pair of headphones straight in, and I could enjoy a massive improvement in sound quality. When I tried it, I thought I'd been struck dead. Silence. The reason, of course, is that the CPC doesn't have an actual amplifier of sufficient power. You can buy the SoundMaster, an all-in-one amplifier plus speakers from Sion Software (061 328 1835) for £20.

A cheaper alternative (and the one that appealed to me, pointless journal that I am), is simply to connect your computer to a stereo through the latter's aux socket. The connections for wiring cables are in the manual, and confirm to a central earth with two signals. And that is enough for electrical bores to make a wiring cable - hence!

## Eah humbug!

Enjoying your new year? Good. I'm glad. Spare a thought, though, for the right

Asatraz staff given the sack (as reported in NCE last week). And I'm talking about the wing-bag Santa carries around full of presents for the kids.

It seems to have been confirmed to Asatraz, which hasn't produced a decent CPC program in ages, concentrating instead on bundling deals.

Amazed at describing the move as a clean sweep of its less productive elements. Could it be, however, Asatraz's (st) way of showing these shoddy (st) things disappear he won't be badly increased profits for his side?

## Canon and Bell's up in the air

Operation Mince took a fair slice out of my Christmas holiday being an altogether more interesting way to spend the Yuletide vacation than stuffing the Carv cake with cold turkey and sitting shumped in front of the Canon/Bell Picture Pairs (y.l.). Still, my time was not entirely wasted, since it enables me to bring you, dear reader, the exclusive playing tips listed herebelow.

★ Always do a reconnaissance of a stretch of land and water before attacking the slope and land installation thereon. That way you don't needlessly waste time crashing into radar towers in line five (narrow on narrow occasions - hence the shape of my nose, but there's another story).

★ Keep an eye on the fuel gauge, and get back to the center more often than you think to. Otherwise the Exocets can sink it before you've noticed they're there.

★ When attacking the bases, use a medium to high level run, as opposed to the diving maneuver in the instructions. It does actually take a little longer, but at least you'll avoid the radar towers.

★ Even selection of Exocets, never mind actually firing the bally things, should always be done while pointing away from your corner. The self-inflicted wound occasioned by angling that simple piece of advice is, believe me, the saddest of all. I know, I was that idiot.

★ Even selection of Exocets, never mind actually firing the bally things, should always be done while pointing away from your corner. The self-inflicted wound occasioned by angling that simple piece of advice is, believe me, the saddest of all. I know, I was that idiot.

## Flying Camel

Users of Mini Office II among whom I count myself, will be interested to learn that the Mini Office II is now, as it



• Mini Office II gets a bit of talking, courtesy of Camel's interpreter

stands, as FA-18 simulator, but a kind of help program that takes the tedious out of using Database's memory operators by allowing you to change parameters (names, units, disk code letters etc) much quicker. It could prove rather useful, and I'll bring you my evaluation just as soon as I've seen a finished copy.

Steven Curry

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## New Office

Details of the new version of *Mini Office* are now being struggled out of *Databases* Manchester HQ by a team of tightly trained industrial espionage agents.

*Mini Office Professional Plus* will consist of the same routines that made up *Mini Office*, together with a spelling checker module with a 50,000 word dictionary, and a thesaurus. The checker works either on *Mini Office* documents in the working memory or separately on *LookEditor* and *Printer* documents. The Thesaurus is also presented as a stand-alone module which will please a list of writers, journalists, authors, lecturers, wordsmiths.

There are also a list of additions promised to the online package (which had quite a few bugs in earlier releases) such as auto-scrolling and easier text saving. These they didn't add a phone bill calculator to top it off.

Just like certain Chequerism of the Echequer, an acute lack of eyesight caused a lot of embarrassment. Exporting will now be possible from the spreadsheet and database. Also, import facilities are being provided in the database - so that data from *Lotusfile* can be used in *Mini Office*.

The manual of the first version drew a lot of criticism. Many people deemed it as useless, which was rather unfair. It at least listed all the commands and everything, almost all in the right order, and made an excellent drop stop. The new version will also come with a whole new manual, written by John Hughes. It will largely be the *AI* in *One Computing* book on *Mini Office* released last year but will have extra sections to cope with the new additions.

*Mini Office Professional Plus* will cost £39.95, details from *Databases* on 0625 938883.

## Well what do you know

Five things you never knew about PCWs:

1. They have sold over a million throughout the world and three quarters of a million in France.
2. There are seven in Czechoslovakia.
3. A higher proportion of women own PCWs than any other computer.
4. They cost over £1,000 in New Zealand.
5. It is the only machine for which a commercially released Welsh word processor exists.

6. You can claim them against tax if you use it to write for business, but only a decreasing proportion of the cost price for each year.

7. A 9612 keyboard works on an 8800 machine and vice versa.

8. Jeffrey Archer had two given to him but doesn't like them so will return his novels and logsheet.

9. Kyle Atkinson does not have a PCW.

10. There are no mentions of PCWs in either the Bible or Shakespeare.

Rob Ainsley

## A real tip

To erase a group name completely in *LookEditor*, erase the file whose name is the group name plus *.GRP* (it never shows on the disk manager). It reverts to a name like *group 0*.



## A better Basic DOS!

Wouldn't it be wonderful if, unlike as with CP/M, MIDEOS, *AmigaDOS*, *AmigaDOS* etc the Basic language itself contained an integral part of the operating system? You could then use all the operating system commands within the language itself, including those in your programs as needed.

There would be no need to have two sets of commands differing in syntax and sub-syntax, one for use at

DOS level and the other for use within the interpreted (or compiled) Basic routine itself.

There would be no need to toggle between Basic and DOS with commands like *BASIC* or *SYSTEM*.

## Two at a time

It would be wonderful if you could run more than one program, or more than one copy of the same program, at the same time. By dropping up time into exceedingly brief slices, and allocating these slices on a non-cyclic basis to these programs (alternatively called tasks), *SEN* (smooth simultaneous running) would be achieved.

In reality, the CPU chip is only running one program at any one time, then suspending that program and starting another. But because the slices, or chunks, of time are so

tiny, the illusion of simultaneous is created. In much the same way that persistence of vision in the eye creates the illusion of motion when slightly differing images are rapidly (i.e. faster than about 15 switches per second) presented to the retina, all the programs will appear to be running simultaneously as the CPU switches between them thousands or tens of thousands of times per second.

On our dream computer there would be the facility to alter the priority or time-impedance of the tasks by instituting - from Basic - in the case of our *BasicDOS/SEN* concurrent machine - the CPU to spend relatively more or fewer slices of time on a particular task than its proportionate share.

This would permit the concurrent operation of a word processor, of an spreadsheet, of a graphics package together with a desktop publisher and a spelling checker, or of several compilers and a structure analysis module.

## Independence at last

Surely it would be wonderful if you could have device independence, so that the system, transparent to the user, took care of all operational differences between DO devices (monitors, keyboards, screens, windows, printers, modems, files, floppy drives, RAM discs, hard drives etc) enabling the user to use the same (common) verbs irrespective of the (destination) nouns...

## Wouldn't it be wonderful?

Now get it: time. Keep guessing as to the identity of the dream machine.

Eric Simmonds

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All the above QL software is produced by Sector software. Ask for our full guide/pricelist of our QL software.

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We are at the moment writing Amiga to Z88 file transfer software and Amiga to QL software. If you are interested in either of these then please contact us for more details.

We stock too many products to mention in any advert, (we have a regular four page advert in *Q/L World* each month), so please send us a SAE or give us a ring for our true product guide and price list.

A goods ordering section is now available on the Bulletin Board, so goods can be ordered by Modem.

## NORTHERN SINCLAIR SHOW

Due to a lack of previous shows in the North for Sinclair machines Sector Software are to be organising a Northern Sinclair show around Preston in Lancashire (Junc 28 or 29 M6) in about March, anyone who would like to be mailed with details or any Spectrum, QL, Z88 companies or peripheral suppliers please contact us for details.

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Here are the highlights of the previous issues - but remember they also contain all your regular favourites: news, games reviews, machine columns, beginners' guide, controversies, tech tips, letters, P8net, vouchers etc etc.

Issue 1: Future of computing, PC graphics, revival of Basic, Xmas games

Issue 2: Which computer?, the perfect wordprocessor, Konix console

Issue 3: Portable computing, Alan Sugar profile part 1, yuppie software

Issue 4: Sega's 16-bit console, best value PC, games that change your life

Issue 5: PC 200 fiasco, DTP guide, computer art, Unix explained

Issue 6: MOT Coupe, careers in computing, Beaktime profile, cracking

Issue 7/8: Best games of '88, review of the year, look forward to '89

Issue 9: Censorship controversy, classic computer problems solved

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# PSsst!

A final page stupidly handed over to cynical old hack, Private I

## MEGASCOOP! The PSsst! crossword

After weeks of research I'm delighted to present the ultimate computer crossword. You should be aware that there are absolutely NO silly clues (especially not 18 across), no giveaway answers (especially not 5 down) and most definitely no prizes beyond the enormous personal satisfaction I am sure you will feel at completing it.

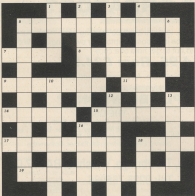
### ACROSS

- 5 How Amstrad's boss disciplines his staff? No, he munches them for breakfast (5, 6)
- 7 Electronic Rats is a maze (4)
- 8 Accounting software firm is wise and cuddly (8)
- 9 Error message is slightly documented (3, 4)
- 11 Memory of a sheep (3)
- 14 On following up Greek letter computer firm engages hand held machines (5)
- 15 Graphics chip in the Amiga - b\*\*\*\*\* mess! (7)
- 17 Essential piece of wood? Both a piano and a computer have one (8)
- 18 Huh! You won't get this one. No one out side of the trade knows the first name of Electronic Art's boss, and being American, Mr Hawkins has not got the sort of monicker you could easily guess. A wee clue: it's a verb that has something to do with drugs and travel (4)
- 19 "It's for you hoo!" should be this software house's slogan - having left Comet so muddled (11)

### DOWN

- 1 Japanese console firm rises over a long period of time (4)
- 2 Cast your mind back four or five years to the early ZX Microbain, and it's from tables like these that software houses used to

- 3 I hear I'm eager to know more about the machine that Commodore so loves to bundle so many times (5)
- 4 Refuse cleverly when alternating current flows on ST over a small market (3, 5)
- 5 This type of business package is so dull (but oh so necessary) that you can have the answer without further ado. It's spread sheet. No, it's not a trick. Imagine you've solved the anagram of "Shope dealers" if you feel the need for a challenge. Or if you prefer, it's what you do before starting a picnic (3, 1)
- 6 It's not hard for a programmer to produce this type of ware (4)
- 10 Spot the link between International Soccer and Matchday and a popular field sport in which 22 grown men kick around a leather sphere (8)
- 12 Gamesweek categorically denies that it would ever base a review on an old movie that's become confused (3, 4)
- 13 Nasty male tendency found in games existing today (5)
- 16 (Of all the moans, many thousands of Archimedes games, this one from Superior was the first (5)
- 18 A useful piece of software which, unfortunately, appears to have some sort of mildly rude meaning. But we're not going to mention that (4)



## Shoot from the Lip... the week's most quotable sayings

"It's an extremely lucrative endorsement and an anachronism. Like your Aunt Ethel it never seems to go away." Commodore as the dear old C64.

"In a hundred years' time it will become apparent that games programmers are the chimney sweeps of our generation." Industry commentator Mike Schillem on the plight of the underpaid whizz kids.

"Keep an eye out for names such as Enterprise, MSX, QL, Tandy Colour Computer and the Commodore Plus

Four. These are all among the industry's walking dead and should not be approached unless you contemplate opening a computer museum." Geoff Wheelwright of The Times dabbling out some buying advice.

"About this time every year numerous organisations seeking publicity target the toy industry with sensationalist charges that gamer media coverage. This year is no exception."

Nintendo's Peter Main on allegations that Nintendo games cause children to become more aggressive.

## NEXT WEEK

### Essential printers

Just which printers are the best for your needs? Express presents a fact-packed guide

### Virgin territory

We explore the interactive computer/video package from Virgin which recreates the trek to the North Pole

### Ten things you never knew...

...about programming languages. Let Express help explain away the mysteries of programming, in the company of Grey Matters

### So farewell then, Alan Sugar

The mammoth Alan Sugar series comes to an end, with our very own wv William Poel looking forward to what the future holds for Amstrad

### PLUS

All your favourite Express regulars, including another bumper letters section, beginners, tech tips, machine-specific columns, reviews, previews, news and all the rest - PLUS, of course, the Express crossword solution

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| Ranarara              | Hewson Consultants | £19.95 |
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| Summer Olympic '88     | Tynesoft | £19.95 |

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| Openplan | Triangle Publishing | £49.95 |
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